



Discontinued as of September 30, 2010

AXW

**Panasonic**  
ideas for life

FOR PC BOARD TO WIRE

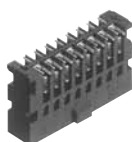
**WIRE-PRESS  
SOCKETS (AXW)**



With hood cover



With semi-cover



Socket

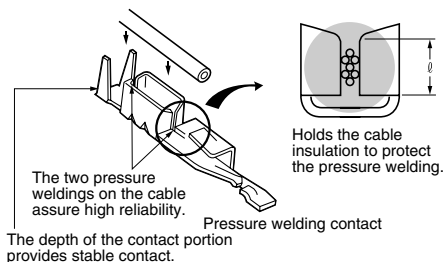
Compliance with RoHS Directive

## FEATURES

**1. Pressure welding method for superior wiring and no need to strip wires.**

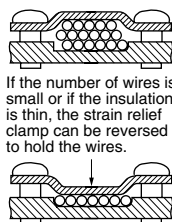
Applicable wires: AWG #22, #24, #26, #28.

**2. Two pressure weldings assure high contact reliability.**

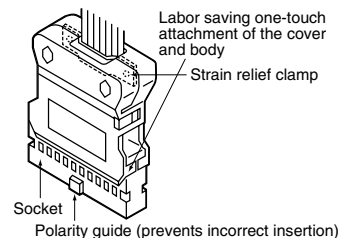


**3. Labor saving one-touch attachment of the cover and socket body.**

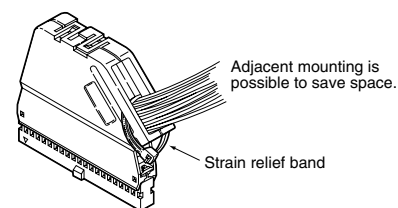
**4. Even if the number of wires is small, the stable pressure welding is acquired.**



**5. Angled hood cover type can save space and makes adjacent mounting possible.**



Vertical hood cover type



Angled hood cover type

**6. Fits MIL headers and low profile headers (box and open types).**

**7. Useful pressure welding tools are available.**

## APPLICATIONS

NC machine, automated equipment, office automation equipment, ME equipment, measurement equipment, communications equipment, amusement and game equipment.

## ORDERING INFORMATION

### 1. Socket

AXW 1 1 1 1 1 A

1: Wire-press sockets (Socket)

<No. of contacts (2 digits)>

<Configuration and polarity guide position>

4: No polarity guide for 10 contact type, types with other number of contacts have 1 polarity guide in middle.

9: Polarity guide in middle for 10 contact type.

<Applicable cable>

Nil: Without contact

2: Pressure welding AWG#22 to #24

3: Pressure welding AWG#26 to #28

<Surface treatment (Pressure welding portion/Terminal portion)>

Nil: Without contact

1: Au plating/Sn plating

<Package form>

A: Individual package



## 2. Socket (Set)

AXW **3**      **1** **A**

3: Wire-press sockets (Set)

<No. of contacts (2 digits)>

<Cover shape>

1: Semi-covers

2: Vertical type hood cover

3: Angle type hood cover

<Configuration and polarity guide position>

4: No polarity guide for 10 contact type,  
types with other number of contacts have 1 polarity guide in middle.

9: Polarity guide in middle for 10 contact type.

<Applicable cable>

Nil: Without contact

2: Pressure welding AWG#22 to #24

3: Pressure welding AWG#26 to #28

<Surface treatment (Pressure welding portion/Terminal portion)>

Nil: Without contact

1: Au plating/Sn plating

<Package form>

A: Individual package

## 3. Cover

AXW **6**   **0**  **A**

6: Wire-press sockets (Cover)

<No. of contacts (2 digits)>

<Connecting wires>

0: Pressure welding method

<Cover shape>

1: Semi-covers

2: Vertical type hood cover

3: Angle type hood cover

<Package form>

A: Individual package

## 4. Contact

AXW **7** **2**  **1**

7: Wire-press sockets (Contact)

<Sales form>

2: 5 in line

<Applicable cable>

2: Pressure welding AWG#22 to #24

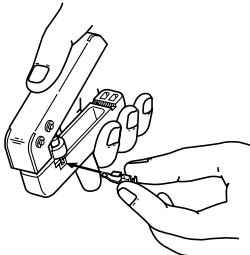
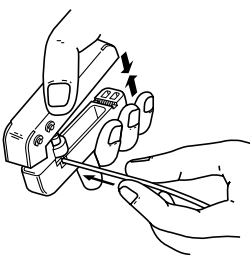
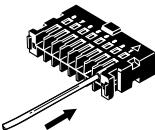
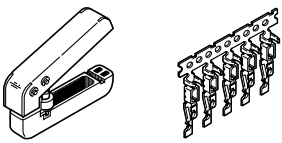
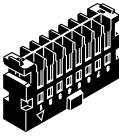
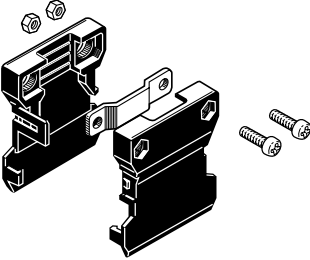
3: Pressure welding AWG#26 to #28

<Surface treatment (Pressure welding portion/Terminal portion)>

1: Au plating/Sn plating

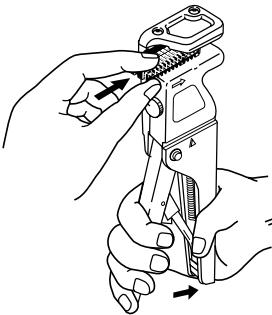
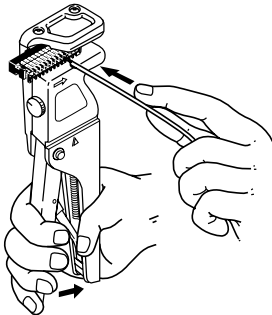
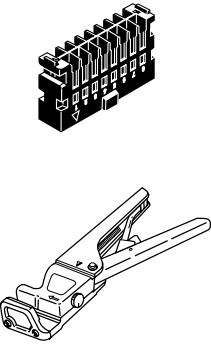
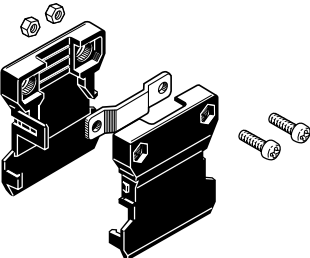
**WIRING AND ASSEMBLY**

1. When using small amounts (about 150 pins can be pressure welding per hour)

|                 |                                                                                                                                                                              |                                                                                                                                                                                       |                                                                                                                                                    |                                                                                                                                                  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Process         | <p>1. Bend the contact back from the carrier, and set it in the pressure welding tool.</p>  | <p>2. Insert the wire without removing its insulation unit it stops, and lightly grip the tool.</p>  | <p>3. After press-fitting the wire, insert it into housing.</p>  | <p>4. Attach the cover to complete the operation. (Note)</p>  |
| Necessary parts |  <p>Stapler type<br/>AXY52000</p> <p>Contacts<br/>(5 in line)</p>                           |  <p>Separate wires</p>                                                                               |  <p>Housing without contacts</p>                                 |  <p>Vertical type hood cover block</p>                        |

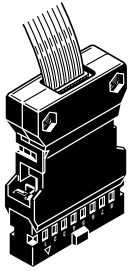
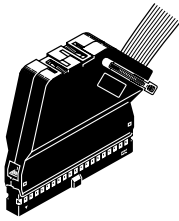
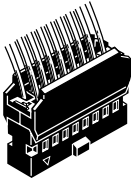
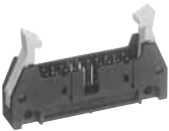
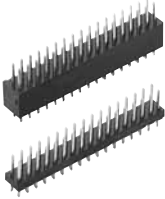
(Note) There are 3 types of cover: semi-covers, vertical type hood cover blocks, and angle type hood cover blocks.

2. When using medium to large amounts (when using pliers-type pressure welding tool, about 450 pins per hour)

|                 |                                                                                                                                                          |                                                                                                                                                                                                                     |                                                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Process         | <p>1. Set the housing with contact in the pressure welding tool.</p>  | <p>2. Insert the wires with insulation attached, until they touch the back, then use the tool's pressure welding operation.</p>  | <p>3. Attach the cover to complete the operation. (Note)</p>  |
| Necessary parts | <p>Housing with contacts</p>  <p>Pliers-type<br/>AXY51000</p>         |  <p>Separate wires</p>                                                                                                           |  <p>Vertical type hood cover block</p>                        |

(Note) There are 3 types of cover: semi-covers, vertical type hood cover blocks, and angle type hood cover blocks.

APPLICABLE HEADERS AND COMBINATIONS

|                                          |                                                                                     |                                                                                      |                                                                                      |
|------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Pressure<br>socket for<br>separate wires |    |     |   |
|                                          | Vertical type hood cover block                                                      | Angled type hood cover block                                                         | Semi-cover<br>Note) With cover installed on socket                                   |
| +                                        |                                                                                     |                                                                                      |                                                                                      |
| Applicable<br>headers                    |    |     |   |
|                                          | Long lever type<br>MIL header                                                       | Box type<br>low profile header                                                       | 7.4mm high type<br>2.54mm high type<br>Open type<br>low profile header               |
| ↓                                        |                                                                                     |                                                                                      |                                                                                      |
| Combinations                             |   |    |    |
|                                          |  |  |  |
| Note) Loose wires omitted from photos    |                                                                                     |                                                                                      |                                                                                      |



Discontinued as of September 30, 2010

AXW

## PRODUCT TYPES

### 1. Individual parts (Standard)

| Type                                 |                                                                                                       |               | No. of contacts                        | Part No.                               |                              | Packing              |                          |          |          |
|--------------------------------------|-------------------------------------------------------------------------------------------------------|---------------|----------------------------------------|----------------------------------------|------------------------------|----------------------|--------------------------|----------|----------|
|                                      |                                                                                                       |               |                                        | Applicable cable                       |                              | Inner carton         | Outer carton             |          |          |
|                                      |                                                                                                       |               |                                        | AWG #22, 24                            | AWG #26, 28                  |                      |                          |          |          |
| Housing                              | Housing with contacts<br>Note) Suitable for use of pliers type or desktop type pressure welding tool. | 10            | AXW110421A<br>(Without polarity guide) | AXW110431A<br>(Without polarity guide) | 100 pcs.                     | 400 pcs.             |                          |          |          |
|                                      |                                                                                                       | 10            | AXW110921A<br>(With polarity guide)    | AXW110931A<br>(With polarity guide)    |                              |                      |                          |          |          |
|                                      |                                                                                                       | 14            | AXW114421A                             | AXW114431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 16            | AXW116421A                             | AXW116431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 20            | AXW120421A                             | AXW120431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 26            | AXW126421A                             | AXW126431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 30            | AXW130421A                             | AXW130431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 34            | AXW134421A                             | AXW134431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 40            | AXW140421A                             | AXW140431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 50            | AXW150421A                             | AXW150431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 60            | AXW160421A                             | AXW160431A                             |                              |                      |                          |          |          |
|                                      |                                                                                                       | 64            | AXW164421A                             | AXW164431A                             |                              |                      |                          |          |          |
|                                      | Housing without contacts<br>Note) Suitable for use of stapler-type pressure welding tool.             | 10            | AXW1104A (Without polarity guide)      |                                        | 100 pcs.                     | 400 pcs.             |                          |          |          |
|                                      |                                                                                                       | 10            | AXW1109A (With polarity guide)         |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 14            | AXW1144A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 16            | AXW1164A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 20            | AXW1204A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 26            | AXW1264A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 30            | AXW1304A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 34            | AXW1344A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 40            | AXW1404A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 50            | AXW1504A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 60            | AXW1604A                               |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 64            | AXW1644A                               |                                        |                              |                      |                          |          |          |
| Cover                                | Hood cover block                                                                                      | Vertical type | 16                                     | AXW61602A                              |                              | 100 pcs.             | 400 pcs.                 |          |          |
|                                      |                                                                                                       |               | 20                                     | AXW62002A                              |                              |                      |                          |          |          |
|                                      |                                                                                                       |               | 26                                     | AXW62602A                              |                              |                      |                          |          |          |
|                                      |                                                                                                       |               | 30                                     | AXW63002A                              |                              |                      |                          |          |          |
|                                      |                                                                                                       |               | Angled type                            | 34                                     | AXW63402A                    |                      | 50 pcs.                  | 200 pcs. |          |
|                                      |                                                                                                       |               |                                        | 40                                     | AXW64002A                    |                      |                          |          |          |
|                                      |                                                                                                       |               |                                        | 50                                     | AXW65002A                    |                      |                          |          |          |
|                                      |                                                                                                       |               |                                        | 60                                     | AXW66002A                    |                      |                          |          |          |
|                                      |                                                                                                       | 64            |                                        | AXW66402A                              |                              |                      |                          |          |          |
|                                      |                                                                                                       | 26            |                                        | AXW62603A                              |                              | 50 pcs.              |                          |          | 200 pcs. |
|                                      |                                                                                                       | 30            |                                        | AXW63003A                              |                              |                      |                          |          |          |
|                                      |                                                                                                       | 34            |                                        | AXW63403A                              |                              |                      |                          |          |          |
|                                      |                                                                                                       | 40            | AXW64003A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 50            | AXW65003A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 60            | AXW66003A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 64            | AXW66403A                              |                                        |                              |                      |                          |          |          |
|                                      | Semi-cover                                                                                            | 10            | AXW61001A                              |                                        | 100 pcs.                     |                      | 400 pcs.                 |          |          |
|                                      |                                                                                                       | 14            | AXW61401A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 16            | AXW61601A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 20            | AXW62001A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 26            | AXW62601A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 30            | AXW63001A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 34            | AXW63401A                              |                                        |                              |                      |                          |          |          |
|                                      |                                                                                                       | 40            | AXW64001A                              |                                        |                              |                      |                          |          |          |
| 50                                   | AXW65001A                                                                                             |               |                                        |                                        |                              |                      |                          |          |          |
| 60                                   | AXW66001A                                                                                             |               |                                        |                                        |                              |                      |                          |          |          |
| 64                                   | AXW66401A                                                                                             |               |                                        |                                        |                              |                      |                          |          |          |
| Contacts (5 in line) (Notes 5 and 6) |                                                                                                       |               | 5                                      | AXW7221<br>(for AWG #22, 24)           | AXW7231<br>(for AWG #26, 28) | 40 rows<br>(200pcs.) | 400 rows<br>(2,000 pcs.) |          |          |

Notes) 1. The parts above are packaged individually. (Contact is tray packing)

2. The vertical type hood cover block is packaged with two covers (one with nuts), one wire bunding metal.

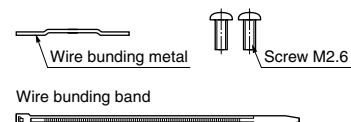
3. The angled type hood cover block is packaged with two covers and one wire bunding band.

4. The angled type hood cover for less than 20 contacts and the vertical type hood cover for less than 14 contacts are not available. Please use the semi-cover.

5. There is a mark "22" on contacts for AWG #22 and #24, and mark "26" for AWG #26 and #28.

6. Remarks for contacts

1) Reel packaging is available.



**2. Set products (produced after order)**

Set products are produced after an order is received, so if you have a tight deadline, please order the products on the above as stand-alone products.

| Type                 | Set product              |                                | No. of contacts                | Part No.                                |                                         | Packing      |              |          |
|----------------------|--------------------------|--------------------------------|--------------------------------|-----------------------------------------|-----------------------------------------|--------------|--------------|----------|
|                      | Socket                   | Cover                          |                                | Applicable cable                        |                                         | Inner carton | Outer carton |          |
|                      |                          |                                |                                | AWG #22, 24                             | AWG #26, 28                             |              |              |          |
| Full set<br>(Note 1) | Housing with contacts    | Vertical type hood cover block | 16                             | AXW3162421A                             | AXW3162431A                             | 50 pcs.      | 200 pcs.     |          |
|                      |                          |                                | 20                             | AXW3202421A                             | AXW3202431A                             |              |              |          |
|                      |                          |                                | 26                             | AXW3262421A                             | AXW3262431A                             |              |              |          |
|                      |                          |                                | 30                             | AXW3302421A                             | AXW3302431A                             |              |              |          |
|                      |                          |                                | 34                             | AXW3342421A                             | AXW3342431A                             |              |              |          |
|                      |                          |                                | 40                             | AXW3402421A                             | AXW3402431A                             |              |              |          |
|                      |                          |                                | 50                             | AXW3502421A                             | AXW3502431A                             |              |              |          |
|                      |                          |                                | 60                             | AXW3602421A                             | AXW3602431A                             |              |              |          |
|                      |                          | Angled type hood cover block   | 64                             | AXW3642421A                             | AXW3642431A                             |              |              |          |
|                      |                          |                                | 26                             | AXW3263421A                             | AXW3263431A                             |              |              |          |
|                      |                          |                                | 30                             | AXW3303421A                             | AXW3303431A                             |              |              |          |
|                      |                          |                                | 34                             | AXW3343421A                             | AXW3343431A                             |              |              |          |
|                      |                          |                                | 40                             | AXW3403421A                             | AXW3403431A                             |              |              |          |
|                      |                          |                                | 50                             | AXW3503421A                             | AXW3503431A                             |              |              |          |
|                      |                          | Semi-cover                     | 60                             | AXW3603421A                             | AXW3603431A                             |              |              |          |
|                      |                          |                                | 64                             | AXW3643421A                             | AXW3643431A                             |              |              |          |
|                      |                          |                                | 10                             | AXW3101421A<br>(Without polarity guide) | AXW3101431A<br>(Without polarity guide) |              |              |          |
|                      |                          |                                | 10                             | AXW3101921A<br>(With polarity guide)    | AXW3101931A<br>(With polarity guide)    |              |              |          |
|                      |                          |                                | 14                             | AXW3141421A                             | AXW3141431A                             |              |              |          |
|                      |                          |                                | 16                             | AXW3161421A                             | AXW3161431A                             |              |              |          |
|                      |                          |                                | 20                             | AXW3201421A                             | AXW3201431A                             |              |              |          |
|                      |                          |                                | 26                             | AXW3261421A                             | AXW3261431A                             |              |              |          |
|                      |                          |                                | 30                             | AXW3301421A                             | AXW3301431A                             |              |              |          |
|                      |                          |                                | 34                             | AXW3341421A                             | AXW3341431A                             |              |              |          |
|                      |                          |                                | 40                             | AXW3401421A                             | AXW3401431A                             |              |              |          |
|                      |                          |                                | 50                             | AXW3501421A                             | AXW3501431A                             |              |              |          |
|                      |                          |                                | 60                             | AXW3601421A                             | AXW3601431A                             |              |              |          |
|                      |                          |                                | 64                             | AXW3641421A                             | AXW3641431A                             |              |              |          |
| Half-set<br>(Note 2) | Housing without contacts |                                | Vertical type hood cover block | 16                                      | AXW31624A                               |              | 50 pcs.      | 200 pcs. |
|                      |                          |                                |                                | 20                                      | AXW32024A                               |              |              |          |
|                      |                          | 26                             |                                | AXW32624A                               |                                         |              |              |          |
|                      |                          | 30                             |                                | AXW33024A                               |                                         |              |              |          |
|                      |                          | 34                             |                                | AXW33424A                               |                                         |              |              |          |
|                      |                          | 40                             |                                | AXW34024A                               |                                         |              |              |          |
|                      |                          | 50                             |                                | AXW35024A                               |                                         |              |              |          |
|                      |                          | 60                             |                                | AXW36024A                               |                                         |              |              |          |
|                      |                          | Angled type hood cover block   | 64                             | AXW36424A                               |                                         |              |              |          |
|                      |                          |                                | 26                             | AXW32634A                               |                                         |              |              |          |
|                      |                          |                                | 30                             | AXW33034A                               |                                         |              |              |          |
|                      |                          |                                | 34                             | AXW33434A                               |                                         |              |              |          |
|                      |                          |                                | 40                             | AXW34034A                               |                                         |              |              |          |
|                      |                          |                                | 50                             | AXW35034A                               |                                         |              |              |          |
|                      |                          | Semi-cover                     | 60                             | AXW36034A                               |                                         |              |              |          |
|                      |                          |                                | 64                             | AXW36434A                               |                                         |              |              |          |
|                      |                          |                                | 10                             | AXW31014A (Without polarity guide)      |                                         |              |              |          |
|                      |                          |                                | 10                             | AXW31019A (With polarity guide)         |                                         |              |              |          |
|                      |                          |                                | 14                             | AXW31414A                               |                                         |              |              |          |
|                      |                          |                                | 16                             | AXW31614A                               |                                         |              |              |          |
|                      |                          |                                | 20                             | AXW32014A                               |                                         |              |              |          |
|                      |                          |                                | 26                             | AXW32614A                               |                                         |              |              |          |
|                      |                          |                                | 30                             | AXW33014A                               |                                         |              |              |          |
|                      |                          |                                | 34                             | AXW33414A                               |                                         |              |              |          |
|                      |                          |                                | 40                             | AXW34014A                               |                                         |              |              |          |
|                      |                          |                                | 50                             | AXW35014A                               |                                         |              |              |          |
|                      |                          | 60                             | AXW36014A                      |                                         |                                         |              |              |          |
|                      |                          | 64                             | AXW36414A                      |                                         |                                         |              |              |          |

Notes) 1. Full-set products (Housing with contact and cover included)

(1) Suitable for use with pliers type.

(2) Produced after an order is received. If you are in a hurry, please order a housing with contact and cover separately from the list above.

2. Half-set products (Housing without contact and cover included)

(1) Suitable for use with stapler-type pressure welding tool

(2) As half-sets do not include a contact, order the appropriate stand-alone contact from the list above.

(3) Produced after an order is received. If you are in a hurry, please order a housing without contact, contacts and cover separately from the list on page 235.



Discontinued as of September 30, 2010

AXW

## SPECIFICATIONS

### 1. Characteristics

|                               | Item                       | Specifications                                                 | Conditions                                                                                                      |
|-------------------------------|----------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Electrical characteristics    | Rated current              | AWG#22, 24: 3A, AWG#26: 2A, AWG#28: 1A                         |                                                                                                                 |
|                               | Rated voltage              | 250V AC                                                        |                                                                                                                 |
|                               | Breakdown voltage          | 1,000V AC for 1 min.                                           | Detection current: 1mA                                                                                          |
|                               | Insulation resistance      | Min. 1,000MΩ                                                   | Using 500V DC megger                                                                                            |
|                               | Contact resistance         | Max. 20mΩ                                                      | Measured based on the HP4338B measurement method of JIS C 5402                                                  |
| Mechanical characteristics    | Unit removal force         | Min. 0.343N {35gf}                                             | Measured by steel-pin-gauge with 0.64±0.01mm square (surface roughness 0.1μm)                                   |
|                               | Composite insertion force  | Max. 2.94N {300gf} × No. of contacts                           |                                                                                                                 |
| Life time characteristics     | Insertion and removal life | 500 times                                                      | Repeat insertion and removal speed of max. 600 times/hour                                                       |
| Environmental characteristics | Ambient temperature        | -50°C to 105°C                                                 | No freezing at low temperatures<br>Ambient temperature of cables should be considered                           |
|                               | Vibration resistance       | Double amplitude: 1.52mm<br>Frequency: 10 to 55Hz (for 3 axes) | No interruption of current longer than 1μs<br>(Max. carrying current 100mA should be impressed during the test) |
|                               | Shock resistance           | 490m/s <sup>2</sup> {50G} (for 3 axes)                         | No interruption of current longer than 1μs<br>(Max. carrying current 100mA should be impressed during the test) |

### 2. Materials and surface treatment

|                                                                      | Part name  | Materials                                                                              | Surface treatment                                                                                                                       |
|----------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Housing                                                              |            | Glass fiber reinforced PBT (UL94V-0)                                                   | —                                                                                                                                       |
|                                                                      | Semi-cover | Glass fiber reinforced PBT (UL94V-0)                                                   | —                                                                                                                                       |
|                                                                      | Hood cover | Glass fiber polycarbonate resin (UL94V-0)<br>Vertical type hood cover (16, 20 contact) | —                                                                                                                                       |
| Contact                                                              |            | Copper alloy                                                                           | Contact portion:<br>Ni plating on base, Au plating on surface<br>Contact pressure portion:<br>Ni plating on base, Sn plating on surface |
| Lead wire bundling metal<br>(enclosed with vertical type hood cover) |            | Steel plate                                                                            | —                                                                                                                                       |
| Lead wire bundling band<br>(enclosed with angled type hood cover)    |            | Polyimide resin                                                                        | —                                                                                                                                       |

### 3. Applicable cable

| No.    | Cross section area  | External figure | Rated current | Remarks                   |
|--------|---------------------|-----------------|---------------|---------------------------|
| AWG#22 | 0.3 mm <sup>2</sup> | 1.5 to 1.1 dia. | 3A            | 12 wires/0.18 should used |
| AWG#24 | 0.2 mm <sup>2</sup> |                 | 3A            |                           |
| AWG#26 | 0.14mm <sup>2</sup> | 1.3 to 1.1 dia. | 2A            |                           |
| AWG#28 | 0.08mm <sup>2</sup> |                 | 1A            |                           |

## DIMENSIONS (Unit: mm)

The CAD data of the products with a **CAD Data** mark can be downloaded from: <http://panasonic-electric-works.net/ac>

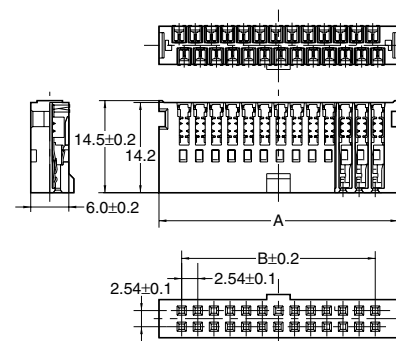
### • Housing with contacts

#### CAD Data



Dimension table (mm)

| No. of contacts | Polarity guide | A    | B     |
|-----------------|----------------|------|-------|
| 10              | 0              | 17.3 | 10.16 |
| 10              | 1              | 17.3 | 10.16 |
| 14              | 1              | 22.4 | 15.24 |
| 16              | 1              | 24.9 | 17.78 |
| 20              | 1              | 30.0 | 22.86 |
| 26              | 1              | 37.6 | 30.48 |
| 30              | 1              | 42.7 | 35.56 |
| 34              | 1              | 47.8 | 40.64 |
| 40              | 1              | 55.4 | 48.26 |
| 50              | 1              | 68.1 | 60.96 |
| 60              | 1              | 80.8 | 73.66 |
| 64              | 1              | 85.9 | 78.74 |



General tolerance: ±0.3

Note) Dimensions of the housing without contact is the same as the right figure.



## • Socket

1) When vertical type hood covers are mated (16, 20, 26, 30, 34, 40, 50, 60 and 64 contacts)

### CAD Data

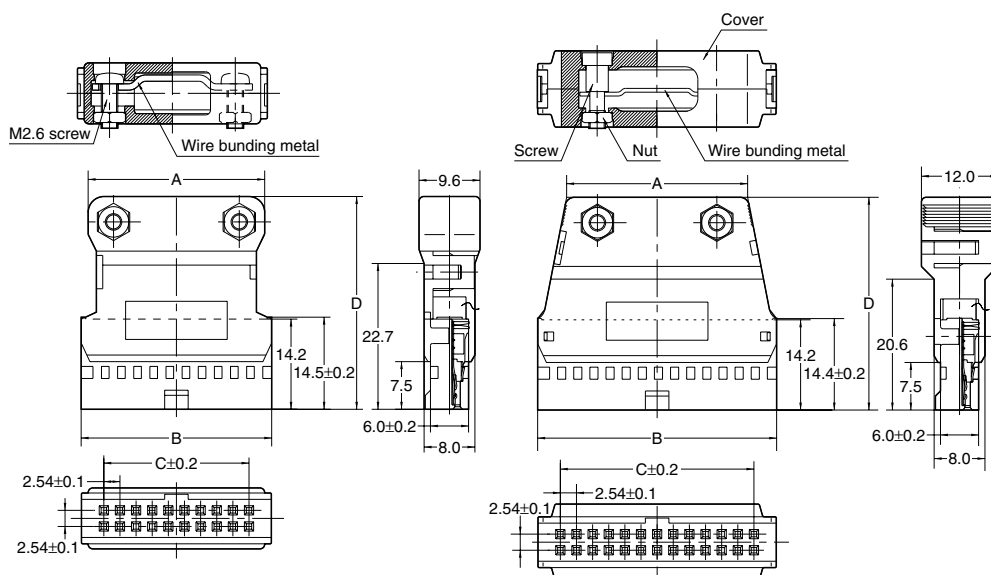
16 and 20 contacts

26 to 64 contacts



Dimension table (mm)

| No. of contacts | A    | B     | C     | D    |
|-----------------|------|-------|-------|------|
| 16              | 24.0 | 24.92 | 17.78 | 33.5 |
| 20              | 27.8 | 30.0  | 22.86 | 33.5 |
| 26              | 28.5 | 37.6  | 30.48 | 33.5 |
| 30              | 33.5 | 42.7  | 35.56 | 33.5 |
| 34              | 38.6 | 47.8  | 40.64 | 33.5 |
| 40              | 43.6 | 55.4  | 48.26 | 41.5 |
| 50              | 56.0 | 68.1  | 60.96 | 41.5 |
| 60              | 68.7 | 80.8  | 73.66 | 41.5 |
| 64              | 73.8 | 85.9  | 78.74 | 41.5 |



General tolerance:  $\pm 0.3$

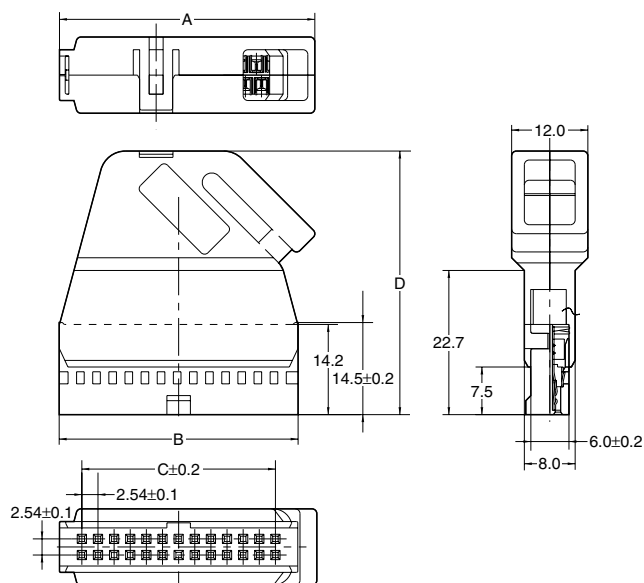
2) When angle type hood covers are mated (26, 30, 34, 40, 50, 60 and 64 contacts)

### CAD Data



Dimension table (mm)

| No. of contacts | A    | B    | C     | D    |
|-----------------|------|------|-------|------|
| 26              | 40.5 | 37.5 | 30.48 | 41.5 |
| 30              | 45.6 | 42.6 | 35.56 | 41.5 |
| 34              | 50.7 | 47.7 | 40.64 | 41.5 |
| 40              | 62.5 | 55.3 | 48.26 | 52.5 |
| 50              | 75.2 | 68.0 | 60.96 | 52.5 |
| 60              | 87.9 | 80.7 | 73.66 | 52.5 |
| 64              | 93.0 | 85.8 | 78.74 | 52.5 |



General tolerance:  $\pm 0.3$

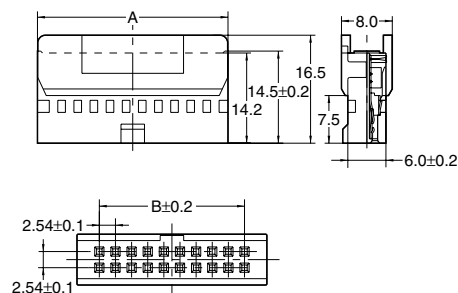
3) When semi-covers are mated

### CAD Data



Dimension table (mm)

| No. of contacts | A     | B     |
|-----------------|-------|-------|
| 10              | 17.3  | 10.16 |
| 14              | 22.38 | 15.24 |
| 16              | 24.92 | 17.78 |
| 20              | 30.0  | 22.86 |
| 26              | 37.62 | 30.48 |
| 30              | 42.7  | 35.56 |
| 34              | 47.78 | 40.64 |
| 40              | 55.4  | 48.26 |
| 50              | 68.1  | 60.96 |
| 60              | 80.8  | 73.66 |
| 64              | 85.88 | 78.74 |

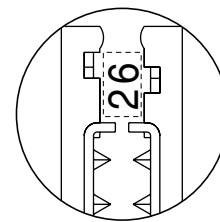
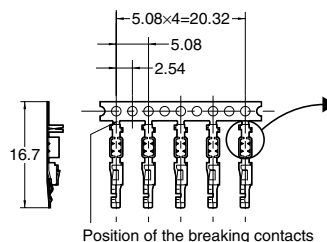


General tolerance:  $\pm 0.3$



## 4) Contacts (5 in line)

## CAD Data



Note) On the contacts there are stamps "22" for AWG #22 and #24 types, and "26" for AWG #26 and #28 types.

General tolerance:  $\pm 0.3$

## NOTES

**1. Use wires and contact types that match.**

The contact's clamp is stamped with 22 or 26.

Use AWG#22 or #24 wire with the type 22 contact and AWG #26 or #28 wire with the type 26 contact.

An incorrect combination will cause faulty connections.

**2. Use wires having a correct outer insulation diameter.**

The use of a wire with an outer insulation diameter larger than the allowable value or a wire with a hard material for the insulation will cause faulty connections.

Furthermore, the use of a wire with an outer insulation diameter less than the allowable value will cause a drop in the clamp strength. Use wires with a suitable outer diameter and insulation material. Suitable wire diameters are shown in the table below.

**Suitable wire diameters**

| Size   | Insulation outer diameter | Remark                                      |
|--------|---------------------------|---------------------------------------------|
| AWG#22 | 1.5 dia. to 1.1 dia.      | AWG #22 is Stranded wire of 12 strands/0.18 |
| AWG#24 |                           | Stranded wire                               |
| AWG#26 | 1.3 dia. to 1.1 dia.      | Stranded wire                               |
| AWG#28 |                           |                                             |

\* AWG#22 and #24 use different contacts from AWG#26 and #28. Refer to the part number chart for the part number.

**3. Inserted wire length during wire pressure welding**

Insert the wire to a proper length and perform the pressure welding.

If the inserted length is too short, the wire will be pressure welded only at one location.

If the inserted length is too long, the wire will end up on the lance portion and a proper pressure welding will not be obtained.

**4. Cut the end of the wire so that it is straight and flat. Be sure no uneven strands remain.**

**5. When pressure welding a wire, fully insert it to the proper position. Be sure to squeeze the lever unit it reaches the end position of the stroke.**

**6. After connecting the wire, check that the wire clamp firmly clamps the wire.**

**7. It may not be possible to cut a contact from the carrier by folding the contact only once.**

**8. The contact holder should be replaced as needed.**

For other details, please verify with the product specification sheets.



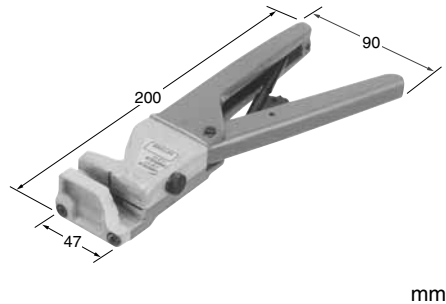
Discontinued as of September 30, 2010

# PRESSURE WELDING TOOLS FOR SEPARATE WIRES

## PRODUCT TYPES

| Product name          |                                                                            | Part No. | Packaging    |              |
|-----------------------|----------------------------------------------------------------------------|----------|--------------|--------------|
|                       |                                                                            |          | Inner carton | Outer carton |
| Pressure welding tool | Pliers type pressure welding tool for separate wires (with feed mechanism) | AXY51000 | —            | 1 pc.        |
|                       | Stapler type pressure welding tool for separate wires                      | AXY52000 | —            |              |
| Accessory             | Contact holder                                                             | AXY5801  | —            | 200 pcs.     |

### • Pliers-type (with feed mechanism)



Pliers-type pressure welding tool for separate wires (with feed mechanism)  
AXY51000

Compliance with RoHS Directive

## FEATURES

**1. Weight balanced design for lightweight handling.**

**2. Lever Lock Mechanism Allows Reliable Pressure Welding**

The lever lock mechanism prevents the lever from returning until the predetermined stroke is reached. This allows for reliable pressure welding, preventing variation due to differences between individual workers.

**3. Automatic feed mechanism indicates the pressure welding terminal number after a pressure welding.**

After each pressure welding, the automatic feed is performed one pitch at a time (2.54mm). At the same time, the number of the connector terminal being pressure-welded is indicated. If the terminal number is set initially, the connector can be moved to any position with the correct terminal number always displayed since the tool is directly linked with the connector.

**4. Stroke adjustment feature.**

The pressure welding stroke can be adjusted to match the diameter of the cable wire for reliable connections.

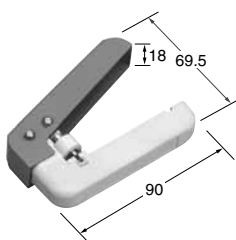
**5. Enables pressure welding of both the socket with contacts and individual contacts.**

A cable can be connected with the contacts positioned in the socket housing (socket housing with contacts) or with the individual contacts separated from the socket housing.

**6. Contact puller feature.**

The contact puller permits incorrectly connected or unnecessary contacts to be pulled out.

### • Stapler type



Stapler type pressure welding tool for separate wires  
AXY52000

Compliance with RoHS Directive

## FEATURES

**1. Compact and lightweight, it fits in a pocket.**

**2. Pressure-weld individual contacts.**

**3. Convenient for on-site maintenance work since connection is possible in small spaces.**

**4. Includes a contact puller.**

## NOTES

1. Never disassemble the tool. Also, do not subject it to shock or drop it from a high place.

**For other details, please verify with the product specification sheets.**