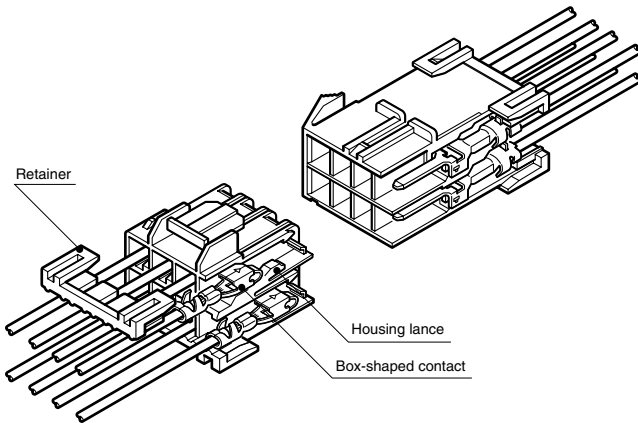


ZL CONNECTOR

5.0mm pitch/Disconnectable Crimp style Wire-to-wire connectors



ZL connectors are reliable, smoothly mating wire-to-wire connectors.

- **Housing lances**
- **Retainer**
- **Box-shaped contacts**
- **Mountable on a variety of panels**

Specifications

- Current rating: 10A AC, DC max.
- Voltage rating: 300V AC, DC max.
- Temperature range: -25°C to +90°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/7m Ω max.
After environmental testing/10m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #26 to #16
0.13 to 1.25mm²
- Applicable panel thickness: 0.7 to 2.4mm
- * Compliant with RoHS.
- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- * Contact JST for details.

Note: The current rating varies depending on the number of circuits and the wire size used in each connector.
The table below lists the current rating as a function of the number of circuits and wire size.

Current unit: A

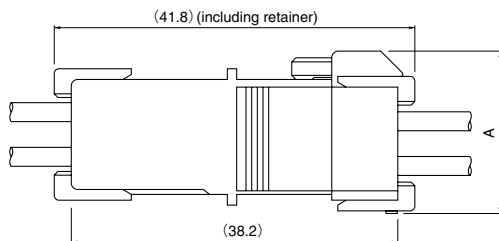
| Circuits | Wire size (AWG) | | | | | |
|----------|-----------------|-----|-----|-----|-----|-----|
| | #16 | #18 | #20 | #22 | #24 | #26 |
| 2 | 10 | 6 | 5 | 4 | 3 | 2 |
| 4 | 9 | 5 | 4 | 3 | 3 | 2 |
| 6 | 8 | 4 | 3 | 3 | 2 | 2 |
| 8 | 6 | 4 | 3 | 3 | 2 | 2 |
| 12 | 6 | 4 | 3 | 3 | 2 | 2 |
| 16 | 5 | 3 | 2 | 2 | 1 | 1 |

Standards

Ⓜ Recognized E60389

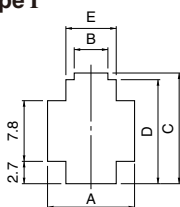
Ⓢ Certified LR20812

Panel layout and Assembly layout

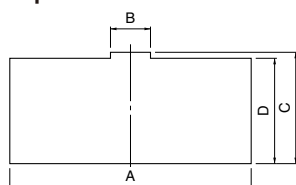


| Circuits | Dimensions A (mm) |
|-----------------|-------------------|
| 2 · 4 | 18.2 |
| 6 · 8 · 12 · 16 | 17.5 |

Shape I



Shape II



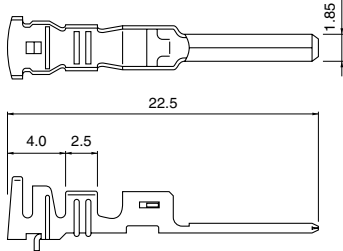
| Circuits | Receptacle housing | Panel hole shape | Panel hole dimensions (mm) General tolerance ±0.13 | | | | | Applicable panel thickness (mm) |
|----------|--------------------|------------------|--|-----|-------|------|------|---------------------------------|
| | | | A | B | C | D | E | |
| 2 | ZLR-02V | I | 11.5 | 4.4 | 13.95 | 13.2 | 6.5 | 0.7~2.4 |
| 4 | ZLR-04V | I | 16.5 | 5.2 | 13.95 | 13.2 | 11.6 | |
| 6 | ZLR-06V | II | 21.5 | 5.2 | 13.95 | 13.2 | — | |
| 8 | ZLR-08V | II | 26.5 | 5.2 | 13.95 | 13.2 | — | |
| 12 | ZLR-12V | II | 36.5 | 5.2 | 13.95 | 13.2 | — | |
| 16 | ZLR-16V | II | 46.5 | 5.2 | 13.95 | 13.2 | — | |

- Note: 1. Punch holes in the panel according to the figures and table shown above. Burrs must be removed.
2. The strength of the panel must be considered when punching two or more holes.
3. The connector must be inserted from the same side as the hole is punched.

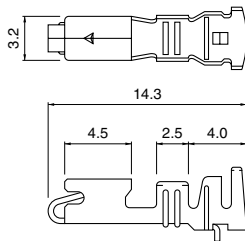
ZL CONNECTOR

Contact

Pin contact



Socket contact



| Model No. | | Applicable wire | | Insulation O.D. (mm) | Q'ty / reel |
|---------------------|---------------------|-----------------|-------------|----------------------|-------------|
| Pin contact | Socket contact | mm ² | AWG # | | |
| SZM-01T-P0.7 | SZF-01T-P0.7 | 0.13~0.5 | 26~20 | 1.3~2.7 | 3,000 |
| SZM-41T-P0.7 | SZF-41T-P0.7 | 0.75~1.25 | 18~16 | 1.9~3.1 | |
| | | 0.3+0.3~0.5+0.5 | 22+22~20+20 | 1.7+1.7~2.0+2.0 | |

Material and Finish

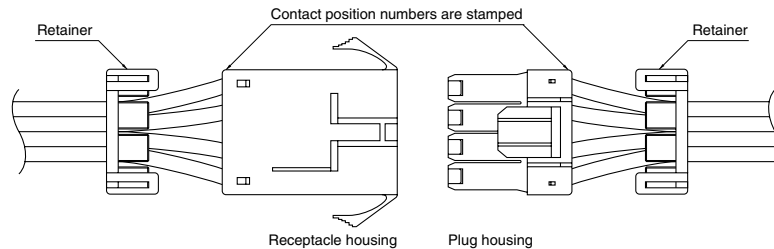
Phosphor bronze, tin-plated (reflow treatment)

RoHS compliance

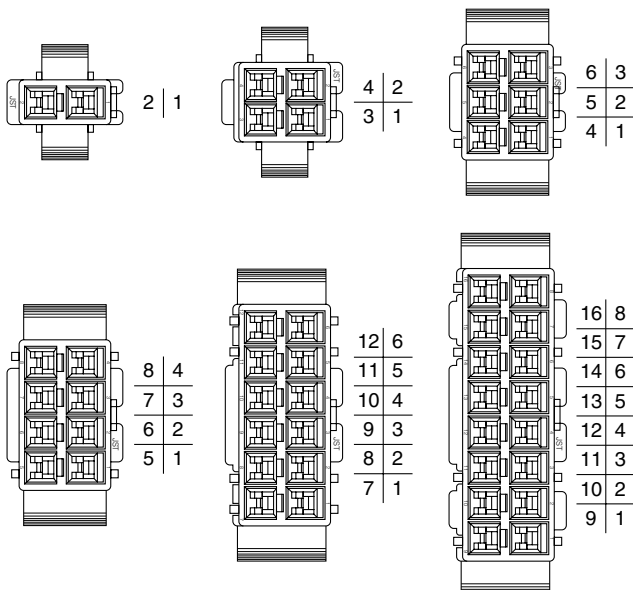
- Note: 1. Contact JST for special products.
2. Contact JST for brass products.

| Contact | Crimping machine | Applicator | | |
|---------------------|------------------|------------------|----------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SZM-01T-P0.7 | AP-K2N | MKS-L | MK/SZF/M-01-07 | APLMK SZF/M01-07 |
| SZF-01T-P0.7 | | — | — | — |
| SZM-41T-P0.7 | | MKS-L | MK/SZF/M-41-07 | APLMK SZF/M41-07 |
| SZF-41T-P0.7 | | — | — | — |

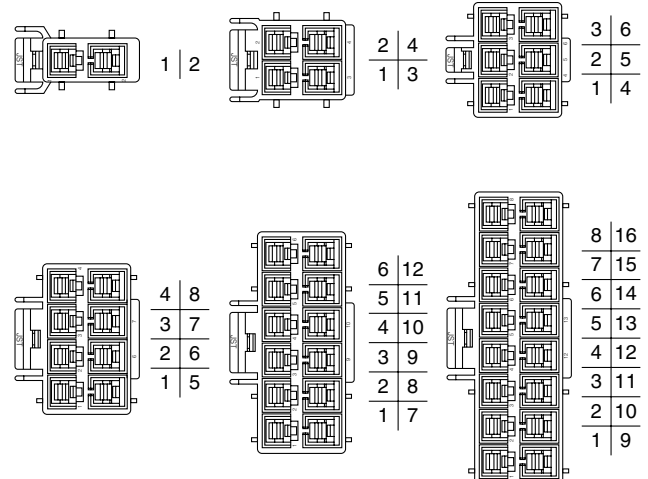
Contact position location numbers



Receptacle housing



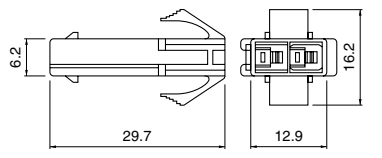
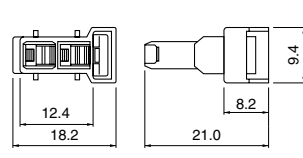
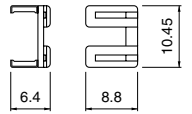
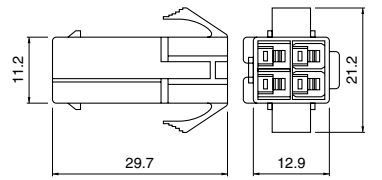
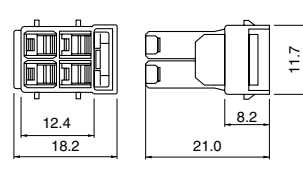
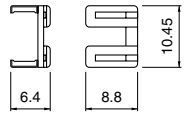
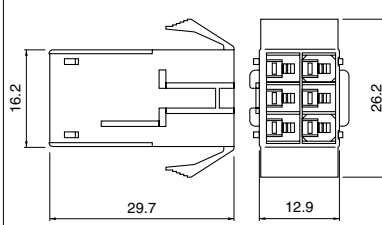
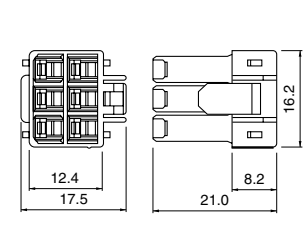
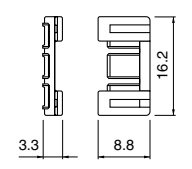
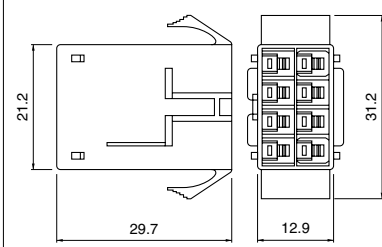
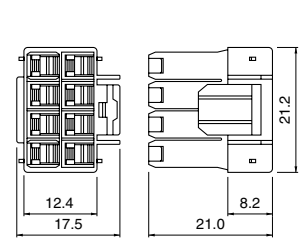
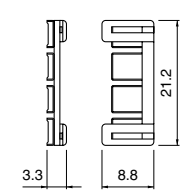
Plug housing



ZL CONNECTOR

Contact

Material: Housing...PA 6, UL94V-0, white
Retainer...Glass-filled PA 66, UL94V-0, ivory

| Circuits | Voltage rating | Current rating | Receptacle housing(for pin contact) | | Plug housing(for socket contact) | | Retainer | |
|----------|----------------|----------------|---|-------------------|--|-------------------|--|---------------------|
| 2 | 300V | 10A | ZLR-02V  | Q'ty / bag 500 | ZLP-02V  | Q'ty / bag 500 | ZLS-02V (Used with both housings with 2 and 4 circuits)  | Q'ty / bag |
| 4 | 300V | 9A | ZLR-04V  | Q'ty / bag 500 | ZLP-04V  | Q'ty / bag 500 |  | 1,000 |
| 6 | 300V | 8A | ZLR-06V  | Q'ty / bag 500 | ZLP-06V  | Q'ty / bag 500 | ZLS-03V  | Q'ty / bag 1,000 |
| 8 | 300V | 6A | ZLR-08V  | Q'ty / bag 500 | ZLP-08V  | Q'ty / bag 500 | ZLS-08V  | Q'ty / bag 1,000 |

RoHS compliance

ZL CONNECTOR

Contact

Material: Housing...PA 6, UL94V-0, white
Retainer...Glass-filled PA 66, UL94V-0, ivory

| Circuits | Voltage rating | Current rating | Receptacle housing(for pin contact) | | Plug housing(for socket contact) | | Retainer | |
|----------|----------------|----------------|-------------------------------------|------------|----------------------------------|------------|--------------------|------------|
| 12 | 300V | 6A | ZLR-12V | Q'ty / bag | ZLP-12V | Q'ty / bag | ZLS-12V | Q'ty / bag |
| | | | | | | | | |
| 16 | 300V | 5A | ZLR-16V | Q'ty / bag | ZLP-16V | Q'ty / bag | ZLS-16V | Q'ty / bag |
| | | | | | | | | |

RoHS compliance

Note: 1. ZL connectors with any number of circuits can be used either panel mounted or free hanging. See "Panel layout" for the panel dimensions.
2. Contact JST for special products.