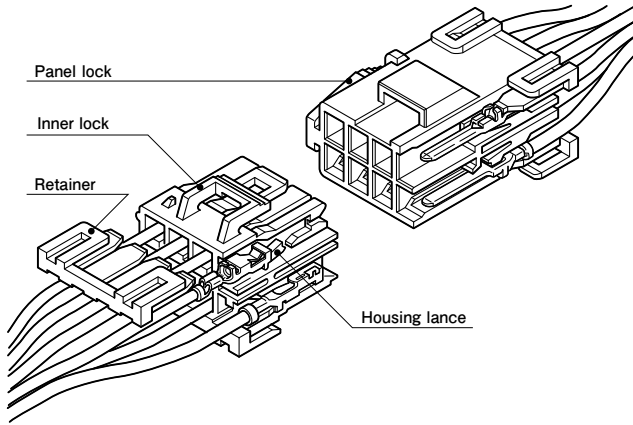


YL CONNECTOR

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



The retainer features added protection against non-insertion or disconnection.

- Housing lance
- Secondary retainers
- Inner-housing lock
- Panel lock construction

Standards

- Recognized E60389
- Certified LR20812
- R9351052

Specifications

- Current rating: 10 A AC/DC (7 A when retainers are mounted)
- Voltage rating: 300 V AC/DC
- Temperature range: -25°C to +90°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 7 mΩ max.
After environmental tests/ 10 mΩ max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage: 1,500 VAC/minute
- Applicable wire: AWG #26 to #16
0.13 to 1.25 mm²
- Applicable panel thickness: 0.7 to 2.0 mm

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 the wire size.

Current unit: A

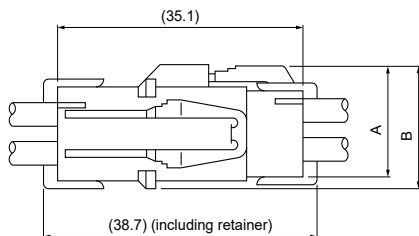
| No. of circuits | Wire size (AWG) | | | | | |
|-----------------|-----------------|-----|-----|-----|-----|-----|
| | #16 | #18 | #20 | #22 | #24 | #26 |
| 1 | 10 | 7 | 5 | 4 | 3 | 2 |
| 2 | 10 | 7 | 5 | 4 | 3 | 2 |
| 3 | 9 | 6 | 4 | 4 | 3 | 2 |
| 4 | 9 | 6 | 4 | 4 | 3 | 2 |
| 6 | 8 | 5 | 3 | 3 | 2 | 2 |
| 8 | 7 | 4 | 3 | 3 | 2 | 2 |
| 9 | 6 | 4 | 3 | 3 | 2 | 2 |
| 12 | 6 | 3 | 2 | 2 | 2 | 2 |
| 15 | 5 | 3 | 2 | 2 | 2 | 1 |
| 16 | 5 | 3 | 2 | 2 | 2 | 1 |
| 21 | 5 | 3 | 2 | 2 | 2 | 1 |

Note: Secondary retainers cannot be used with AWG #16 wires.

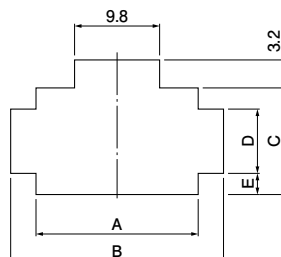
* In using the products, refer to "Handling Precautions for Terminals and Connectors" described on our website (Technical documents of Product information page).

- * RoHS2 compliance
- * Dimensional unit: mm
- * Contact JST for details.

Panel Layout and Assembly layout



| Type | No. of circuits | Dimensions (mm) | |
|------------|---------------------|-----------------|------|
| | | A | B |
| Single row | 2 · 3 | 9.5 | 10.8 |
| 2-row | 4 · 6 · 8 · 12 · 16 | 15.3 | 16.6 |
| 3-row | 9 · 12 · 15 · 21 | 20.5 | 21.8 |



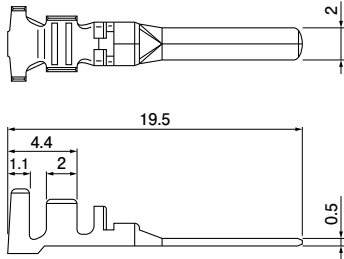
| No. of circuits | Receptacle housing Model No. | Panel thickness (mm) | 0.7 to 2.0 | | 0.7 to 0.8 | | 0.9 to 1.3 | | 1.4 to 2.0 | |
|-----------------|------------------------------|----------------------|------------|------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | | A | B | C | D ^{±0.1} | E ^{±0.1} | D ^{±0.1} | E ^{±0.1} | D ^{±0.1} |
| 2 | YLR-02V | 10.7 | 16.8 | 7.1 | 4.4 | 1.35 | 5.0 | 1.05 | 5.6 | 0.75 |
| 3 | YLR-03V | 15.3 | 21.3 | 7.1 | 4.4 | 1.35 | 5.0 | 1.05 | 5.6 | 0.75 |
| 4 | YLR-04V | 10.7 | 16.8 | 12.9 | 7.1 | 2.9 | 7.7 | 2.6 | 8.3 | 2.3 |
| 6 | YLR-06V | 15.3 | 21.3 | 12.9 | 7.1 | 2.9 | 7.7 | 2.6 | 8.3 | 2.3 |
| 8 | YLR-08V | 19.8 | 25.8 | 12.9 | 7.1 | 2.9 | 7.7 | 2.6 | 8.3 | 2.3 |
| 9 | YLR-09V | 15.3 | 21.3 | 18.2 | 7.1 | 5.55 | 7.7 | 5.25 | 8.3 | 4.95 |
| 12 | YLR-12V | 19.8 | 25.8 | 18.2 | 7.1 | 5.55 | 7.7 | 5.25 | 8.3 | 4.95 |
| | YLR-12VA | 28.9 | 34.8 | 12.9 | 7.1 | 2.9 | 7.7 | 2.6 | 8.3 | 2.3 |
| 15 | YLR-15V | 24.4 | 30.3 | 18.2 | 7.1 | 5.55 | 7.7 | 5.25 | 8.3 | 4.95 |
| 16 | YLR-16V | 37.9 | 43.8 | 12.9 | 7.1 | 2.9 | 7.7 | 2.6 | 8.3 | 2.3 |
| 21 | YLR-21V | 33.5 | 39.3 | 18.2 | 7.1 | 5.55 | 7.7 | 5.25 | 8.3 | 4.95 |

- 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.

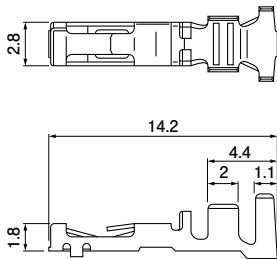
YL CONNECTOR

Contact

Pin contact



Socket contact



| Model No. | | Applicable wire | | Insulation O.D. (mm) | Q'ty/reel |
|---------------|----------------|----------------------|------------------|----------------------|-----------------------------------|
| Pin contact | Socket contact | mm ² | AWG # | | |
| SYM-01T-P0.5A | SYF-01T-P0.5A | 0.13~0.5 | 26~20 | 1.3~2.5 | 4,000 (SYM-01T-P0.5A) 5,000 |
| SYM-41T-P0.5A | SYF-41T-P0.5A | 0.5 ~1.25 | 20~16 | 2.0~3.4 | |
| | | *0.3+0.3~ 0.5+0.5 | *22+22~ 20+20 | *1.5+1.5~ 2.0+2.0 | |

Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

RoHS2 compliance

Note: 1. Contact JST for special products.

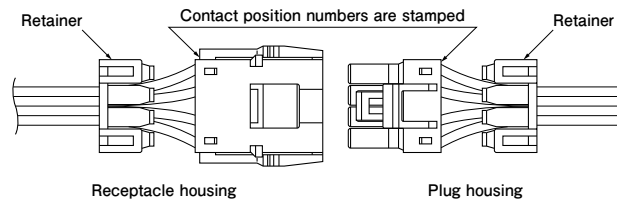
2. Retainers cannot be used with electric wire whose insulation O.D. exceeds 2.7 mm and AWG #16.

3. *Marked products are not approved by TÜV .

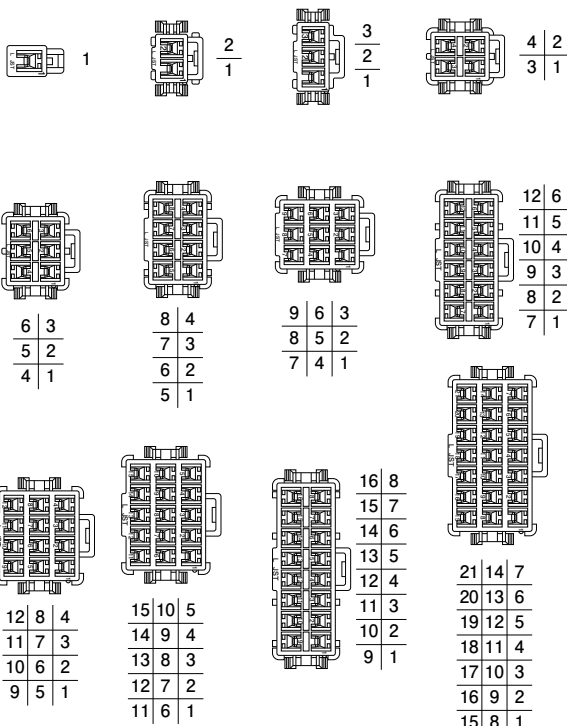
| Contact | Crimping machine | Applicator | | |
|---------------|------------------|------------------|----------------|----------------------------|
| | | Crimp applicator | Dies | Crimp applicator with dies |
| SYM-01T-P0.5A | AP-K2N | MKS-L | MK/SYF/M-01-05 | APLMK SYF/M01-05 |
| SYF-01T-P0.5A | | | | |
| SYM-41T-P0.5A | | | MK/SYF/M-41-05 | APLMK SYF/M41-05 |
| SYF-41T-P0.5A | | | | |

Note: Contact JST for fully automatic crimping applicator.

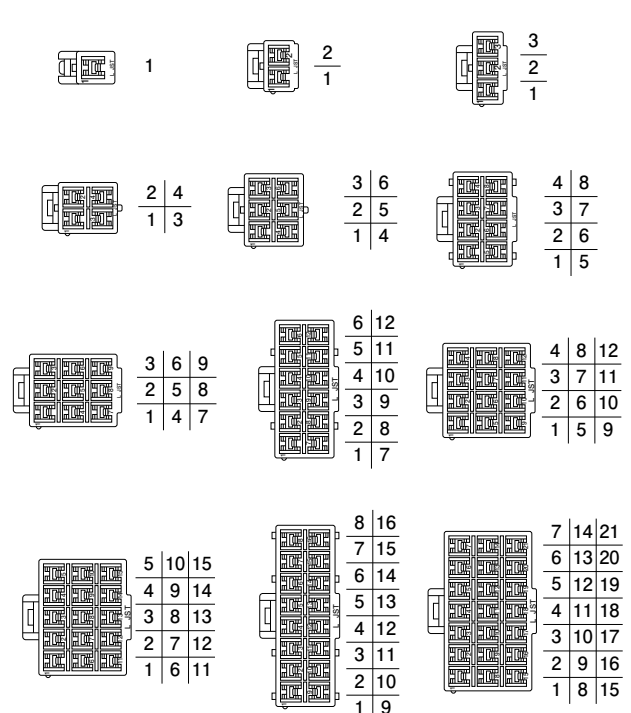
Contact position location numbers



Receptacle housing



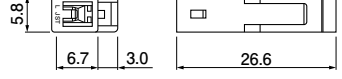
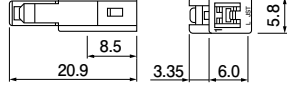
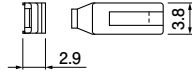
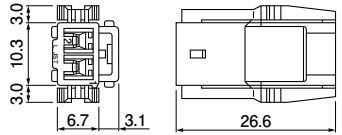

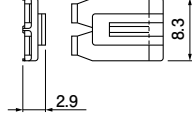
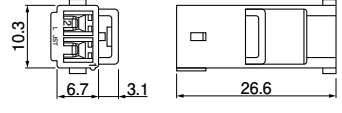
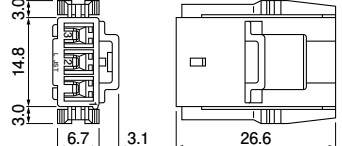

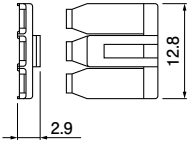

Plug housing



YL CONNECTOR

Housing

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

| No. of circuits | Voltage rating | Current rating | Receptacle housing (for pin contact) | Plug housing (for socket contact) | Retainer |
|-----------------|----------------|----------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 300 V | 7 A (10 A) | YLR-01VF  | YLP-01V  | YLS-01V  |
| | | | Q'ty/ bag 500 | | |
| 2 | 300 V | 7 A (10 A) | YLR-02V  | YLP-02V  | YLS-02V  |
| | | | YLR-02VF  | | |
| 3 | 300 V | 6 A (9 A) | YLR-03V  | YLP-03V  | YLS-03V (commonly used for 3-circuit housing and 6-circuit housing)  |
| | | | YLR-03VF  | | |

RoHS2 compliance

Note: 1. Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)
2. Contact JST for Glow Wire compliant connectors.

YL CONNECTOR

Housing

Material: Housing...PA 66, UL94V-0, white

Retaine...Glass-filled PA 66, UL94V-0, ivory

| No. of circuits | Voltage rating | Current rating | Receptacle housing (for pin contact) | Plug housing (for socket contact) | Retainer |
|-----------------|----------------|----------------|--------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------|
| 4 | 300 V | 6 A (9 A) | YLR-04V | YLP-04V | YLS-02V |
| | | | YLR-04VF | | |
| 6 | 300 V | 5 A (8 A) | YLR-06V | YLP-06V | YLS-03V (commonly used for 3-circuit housing and 6-circuit housing) |
| | | | YLR-06VF | | |
| 8 | 300 V | 4 A (7 A) | YLR-08V | YLP-08V | YLS-08V |
| | | | YLR-08VF | | |
| 9 | 300 V | 4 A (6 A) | YLR-09V | YLP-09V | — |

RoHS2 compliance

Note: 1. Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

2. Contact JST for Glow Wire compliant connectors.

Housing

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

| No. of circuits | Voltage rating | Current rating | Receptacle housing (for pin contact) | Plug housing (for socket contact) | Retainer |
|-----------------|----------------|----------------|--------------------------------------|-----------------------------------|--------------------|
| 12 | 300 V | 3 A (6 A) | YLR-12VA | YLP-12VA | YLS-12V |
| | | | Q'ty/ bag | 200 | Q'ty/ bag |
| 15 | 300 V | 3 A (5 A) | YLR-12V | YLP-12V | — |
| | | | Q'ty/ bag | 200 | Q'ty/ bag |
| 15 | 300 V | 3 A (5 A) | YLR-15V | YLP-15V | — |
| | | | Q'ty/ bag | 200 | Q'ty/ bag |
| 16 | 300 V | 3 A (5 A) | YLR-16V | YLP-16V | YLS-16V |
| | | | Q'ty/ bag | 100 | Q'ty/ bag |

RoHS2 compliance

Note: 1. Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

2. Contact JST for Glow Wire compliant connectors.

YL CONNECTOR

Housing

Material: Housing...PA 66, UL94V-0, white

| No. of circuits | Voltage rating | Current rating | Receptacle housing (for pin contact) | | Plug housing (for socket contact) | | Retainer | | | |
|-----------------|----------------|----------------|--------------------------------------|-----|-----------------------------------|--------------------|----------|--------------|---|--------------|
| 21 | 300 V | 3 A (5 A) | YLR-21V | | Q'ty/ bag | YLP-21V | | Q'ty/ bag | — | Q'ty/ bag |
| | | | | 100 | | 200 | | — | — | |

RoHS2 compliance

Note: 1. Current rating in parentheses is for use with AWG #16 wire. (Retainers are not mountable.)

2. Contact JST for Glow Wire compliant connectors.