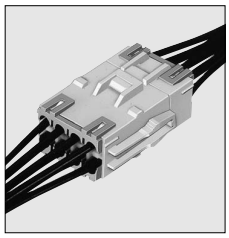
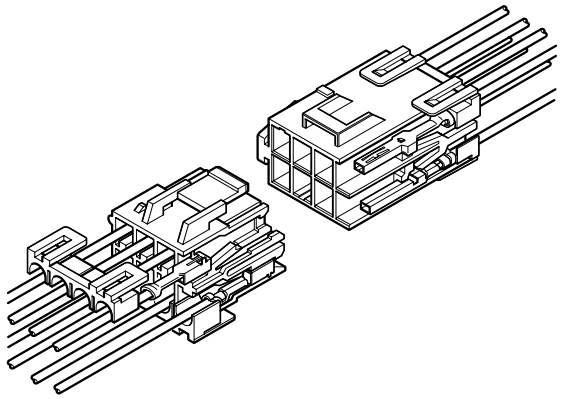


VL CONNECTOR

6.2mm pitch/Disconnectable Crimp style Wire-to-wire connectors



The VL connector is a 6.2mm pitch wire-to-wire connector designed for circuits requiring up to 20A (1 or 2-circuit with AWG #12 wire).

- ***Housing lances for contact retention***
- ***Secondary retainer***
- ***Suited for circuits with high power requirements***
- ***Panel lock construction***

Standards

Recognized E60389

Certified LR20812

R9351103

Specifications

- Current rating: 20A AC, DC max.
- Voltage rating: 600V AC, DC max.(300V in accordance with the Electrical Appliance and Material Safety Law in Japan)
- 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: 2,000V AC/minute
- Applicable wire: AWG #22 to #12 0.3 to 3.5mm^2
- Applicable panel thickness: 0.5 to 2.0mm

* 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 the wire size.

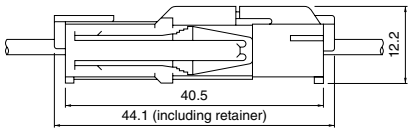
Current unit: A

Circuits	Wire size (AWG)					
	#12	#14	#16	#18	#20	#22
1	20	15	10	8	6	4
2	20	15	10	8	6	4
3	19	14	9	8	6	4
4	18	13	9	7	6	4
6	16	12	8	7	5	3
8	16	11	7	6	5	3
12	15	10	7	6	4	3

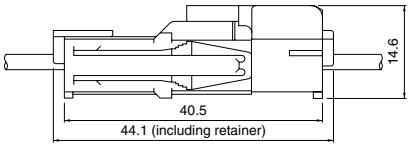
Panel layout and Assembly layout

(2, 3 and single-row 4 circuits)

<Inner-housing lock>

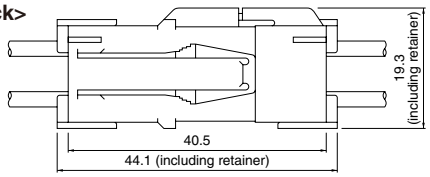


<Outer-housing lock>

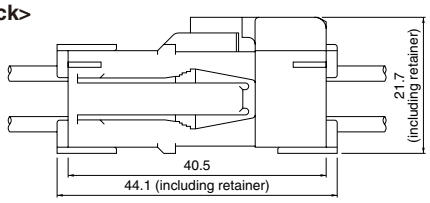


(4, 6, 8 and 12 circuits)

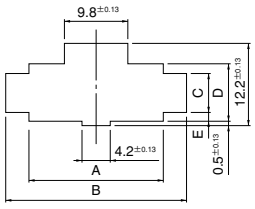
<Inner-housing lock>



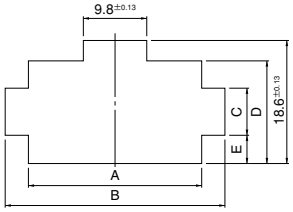
<Outer-housing lock>



Shape I



Shape II

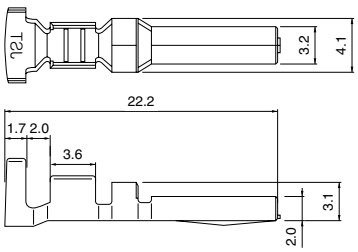


Circuits	Receptacle housing Model No.	Panel hole shape	Panel hole dimensions (mm) General tolerance A, B, D: ±0.13 C, E: ±0.1					Applicable panel thickness (mm)
			A	B	C	D	E	
2	**VLR-02V**	I	13.8	20.6	5.7	8.5	1.4	0.5～2.0
3	**VLR-03V**	I	20.0	26.8	5.7	8.5	1.4	
4	**VLR-04V**	II	13.8	20.6	7.0	15.4	4.2	
4 (Single-row)	**VLR-04VN**	I	26.2	33.0	5.7	8.5	1.4	
6	**VLR-06V**	II	20.0	26.8	7.0	15.4	4.2	
8	**VLR-08V**	II	26.2	33.0	7.0	15.4	4.2	
12	**VLR-12V**	II	38.9	45.4	7.0	15.4	4.2	

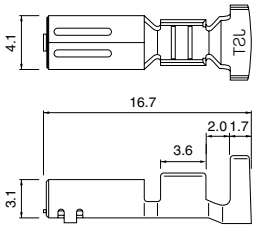
Note: 1. Punch holes in the panel according to the figures and table shown above. Burrs must be removed.
2. The strength of the panel must be considered when punching two or more holes.
3. The connector must be inserted from the same side as the hole is punched.

Contact

Pin contact



Socket contact



Model No.		Applicable wire		Insulation O.D. (mm)	Q'ty / reel
Pin contact	Socket contact	mm²	AWG #		
*SVM-42T-P2.0	*SVF-42T-P2.0	0.3～1.25	22～16	1.7～3.2	2,000
		0.3+0.3～0.5+0.75	22+22～20+18	1.7+1.7～2.5+2.7	
SVM-61T-P2.0	SVF-61T-P2.0	0.5～2.0	20～14	1.9～3.4	
		0.5+0.5～0.75+1.25	20+20～18+16	1.9+1.9～2.1+2.7	
SVM-81T-P2.0	SVF-81T-P2.0	3.5	12	4.1	

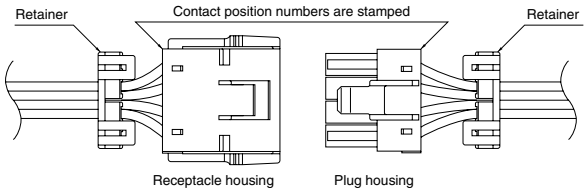
Material and Finish
Phosphor bronze, tin-plated (reflow treatment)

RoHS compliance

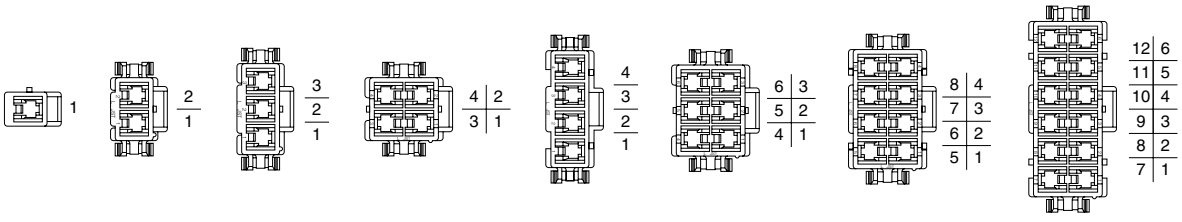
Note: 1. Contact JST for special products.
*2. *Marked products are not TÜV approved.*

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVM-42T-P2.0	AP-K2N	MKS-L	MK/SVF/M-42-20	APLMK SVF/M42-20
SVF-42T-P2.0		—	—	—
SVM-61T-P2.0		MKS-L	MK/SVF/M-61-20	APLMK SVF/M61-20
SVF-61T-P2.0		—	—	—
SVM-81T-P2.0		MKS-L	MK/SVF/M-81-20	APLMK SVF/M81-20
SVF-81T-P2.0		—	—	—

Contact position location numbers

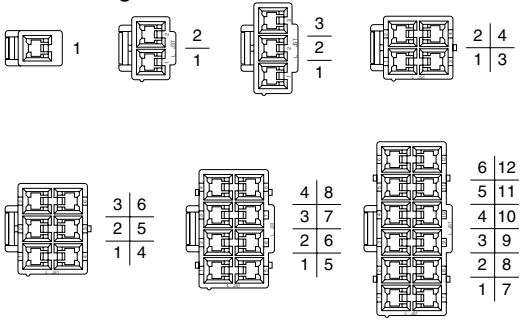


Receptacle housing

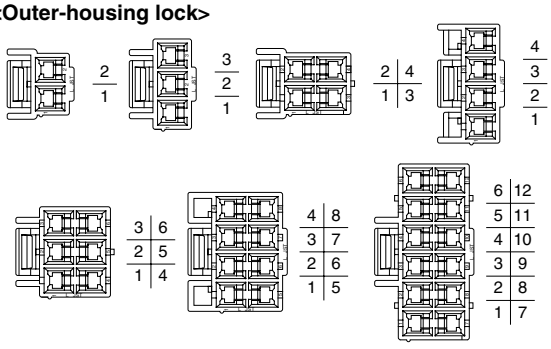


Plug housing

<Inner-housing lock>

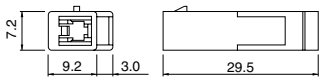
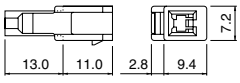
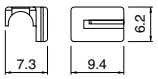
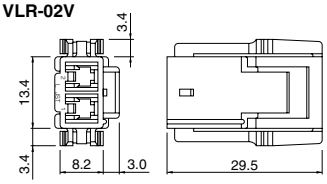
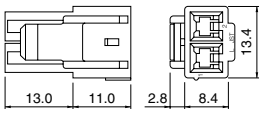
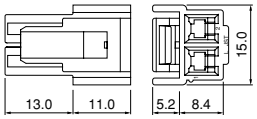
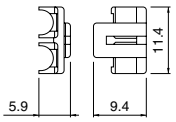
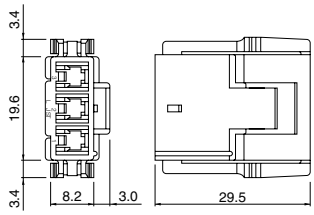
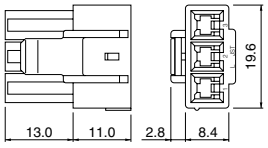
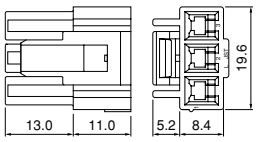
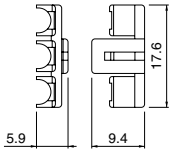
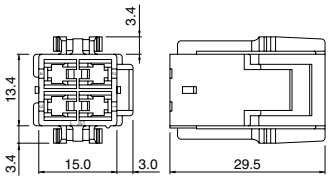
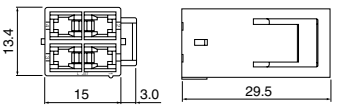
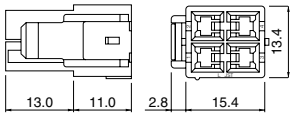
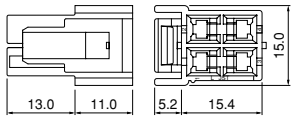
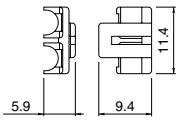
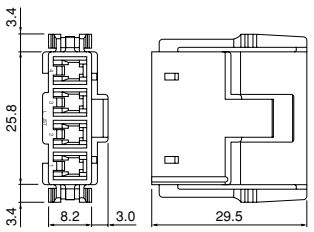
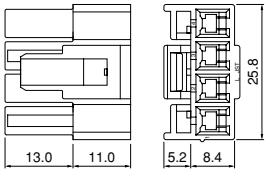
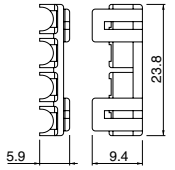


<Outer-housing lock>



Housing

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

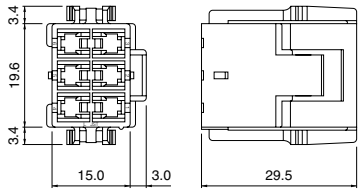
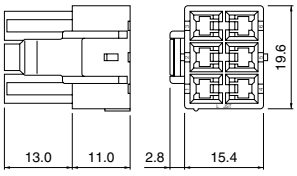
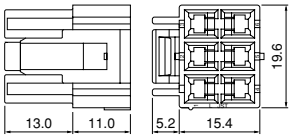
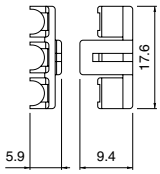
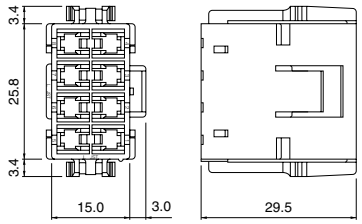
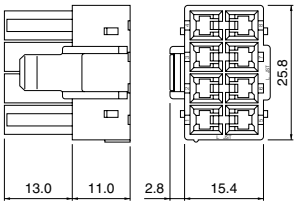
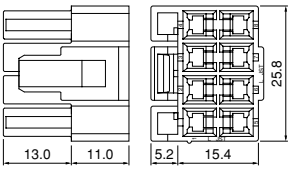
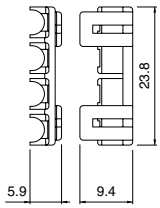
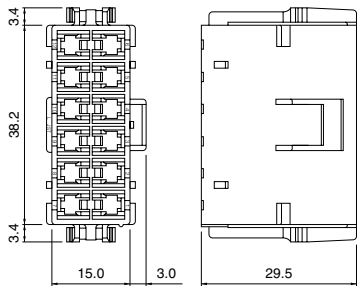
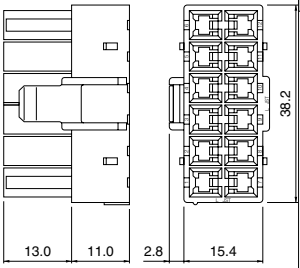
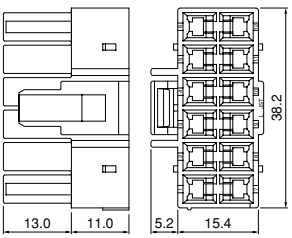
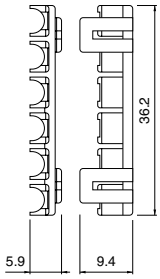
Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag	Retainer	Q'ty / bag
1	600V	20A	**VLR-01VF** (Without panel lock product) 	500	**VLP-01V** 	500	**VLS-01V** 	1,000
2	600V	20A	**VLR-02V**  ***VLR-02VF** (Without panel lock product) 	500	**VLP-02V**  **VLP-02V-1** 	500	**VLS-02V** (commonly used for 2-circuit housing and 4-circuit housing) 	1,000
3	600V	19A	**VLR-03V** 	500	**VLP-03V**  **VLP-03V-1** 	500	**VLS-03V** (commonly used for 3-circuit housing and 6-circuit housing) 	1,000
4	600V	18A	**VLR-04V**  ***VLR-04VF** (Without panel lock product) 	500	**VLP-04V**  **VLP-04V-1** 	500	**VLS-02V** 	1,000
			VLR-04VN 	500	**VLP-04VN-1** 	500	**VLS-08V** (commonly used for 4-circuit housing and 8-circuit housing) 	1,000

RoHS compliance

Note: 1. Contact JST for special products.
*2. *Marked products are not UL/CSA/TÜV approved. (*1 marked product is not only TUV approved.)*

Housing

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

Circuits	Voltage rating	Current rating	Receptacle housing(for pin contact)	Q'ty / bag	Plug housing(for socket contact)	Q'ty / bag	Retainer	Q'ty / bag
6	600V	16A	**VLR-06V** 	500	**VLP-06V**  **VLP-06V-1** 	500	**VLS-03V** (commonly used for 3-circuit housing and 6-circuit housing) 	1,000
8	600V	16A	**VLR-08V** 	100	**VLP-08V**  **VLP-08V-1** 	200	**VLS-08V** (commonly used for 4-circuit housing and 8-circuit housing) 	1,000
12	600V	15A	**VLR-12V** 	100	**VLP-12V**  **VLP-12V-1** 	100	**VLS-12V** 	1,000

RoHS compliance
Note: Contact JST for special products.