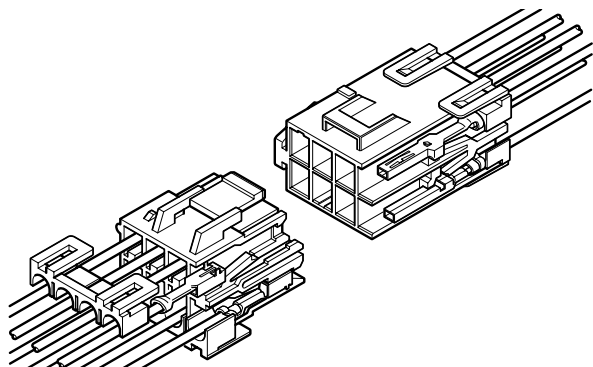


VL CONNECTOR

6.2mm pitch/Disconnectable Crimp style Wire-to-wire connectors
(Combined use for both wire-to-board and wire-to-wire connections)



This VL connector is designed for wire-to-wire and wire-to-board 6.2 mm pitch connector corresponding to large current up to 20 A (1 or 2-circuit with 3.5 mm² wire). Secondary retainer, which prevents from insufficient insertion of contact and coming off contact, may use and large current circuit can be connected certainly and safety.

- 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: 20 A AC, DC max.
- Voltage rating: 600 V AC, DC max.
- 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: 2,000 VAC/minute
- Applicable wire: AWG #22 to #12
0.3 to 3.5 mm²
- Applicable panel thickness: 0.5 to 2.0 mm

- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- * Contact JST for details.
- * Compliant with RoHS.

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.

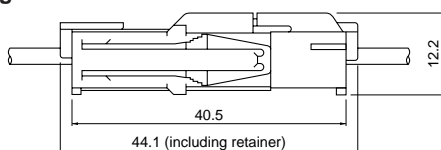
Current unit: A

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

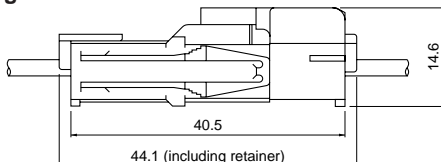
Panel layout and Assembly layout

<2, 3, 4 circuits (single-row)>

Inner-housing lock

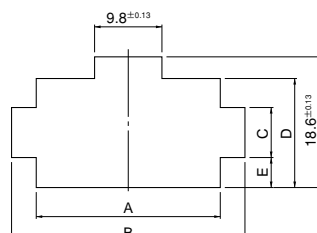
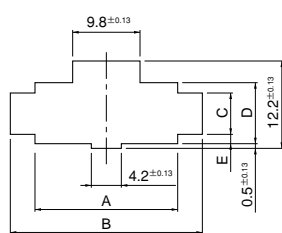


Outer-housing lock



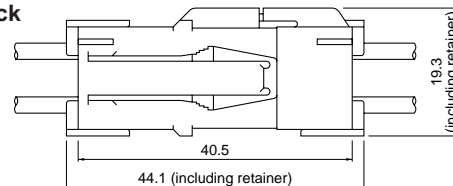
Shape I

Shape II

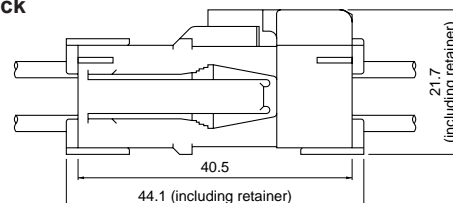


<4, 6, 8, 12 circuits>

Inner-housing lock



Outer-housing lock

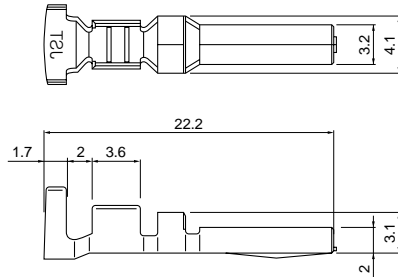


Circuits	Receptacle housing Model No.	Panel hole shape	Panel hole dimensions (mm) General tolerance A, B, D: ±0.13 C, E: ±0.1					Applicable panel thickness (mm)
			A	B	C	D	E	
2	VLR-02V	I	13.8	20.6	5.7	8.5	1.4	0.5~2.0
3	VLR-03V	I	20.0	26.8	5.7	8.5	1.4	
4	VLR-04V	II	13.8	20.6	7.0	15.4	4.2	
4 (Single-row)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

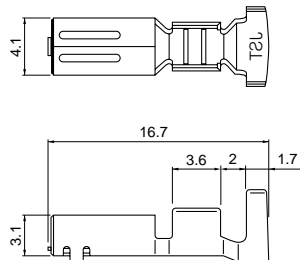
- Note: 1. Punch holes in the panel according to the figures and table shown above. Burrs must be removed.
2. The strength of the panel must be considered when punching two or more holes.
3. The connector must be inserted from the same side as the hole is punched.

Contact

Pin contact



Socket contact



Model No.		Applicable wire		Insulation	Q'ty/ reel
Pin contact	Socket contact	mm ²	AWG #	O.D. (mm)	
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)

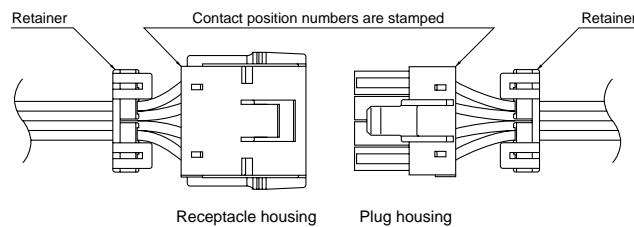
RoHS compliance

Note: Contact JST for special products.

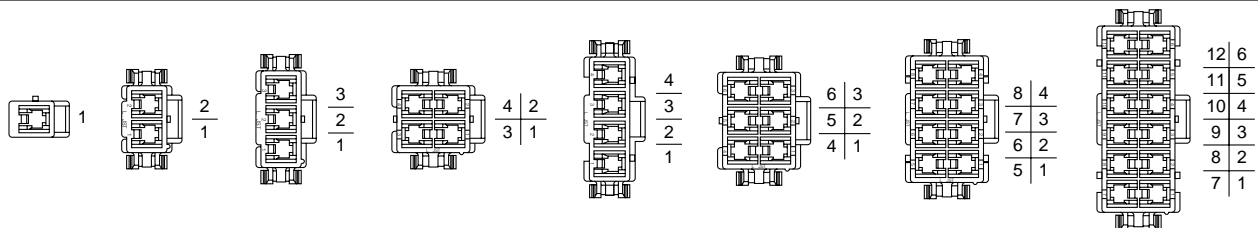
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVM-42T-P2.0	AP-K2N	MKS-L	MK/SVF/M-42-20	APLMK SVF/M42-20
SVF-42T-P2.0		—	—	—
SVM-61T-P2.0		MKS-L	MK/SVF/M-61-20	APLMK SVF/M61-20
SVF-61T-P2.0		—	—	—
SVM-81T-P2.0		MKS-L	MK/SVF/M-81-20	APLMK SVF/M81-20
SVF-81T-P2.0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

Note: Contact JST for fully automatic crimping applicator.

Contact position location numbers

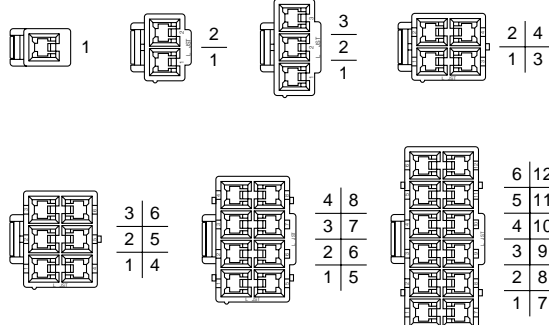


Receptacle housing

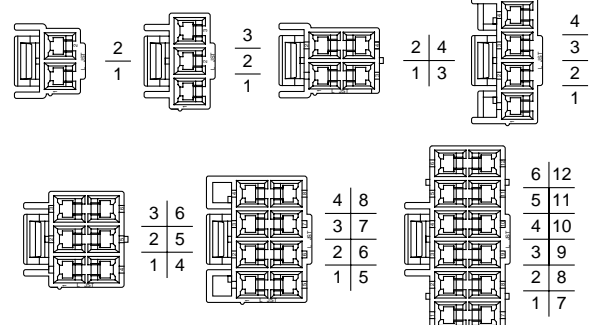


Plug housing

<Inner-housing lock>



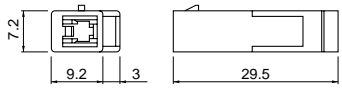
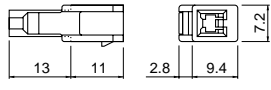
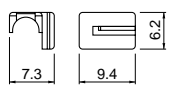
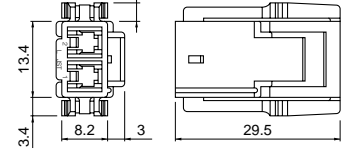
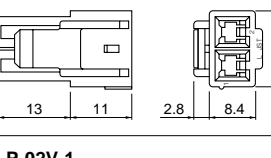
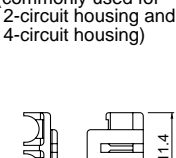
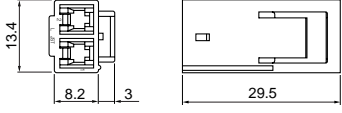
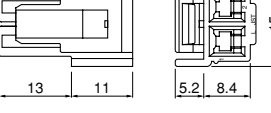
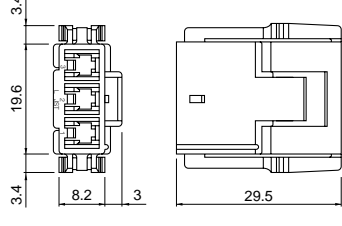
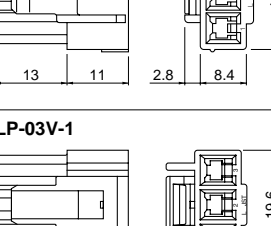
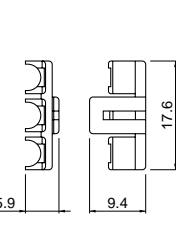
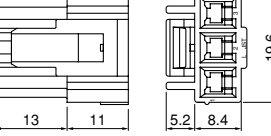
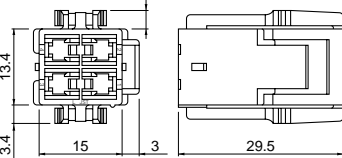
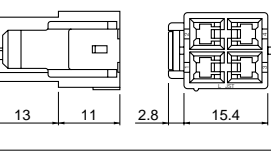
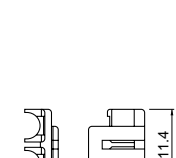
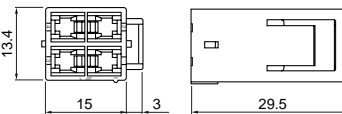
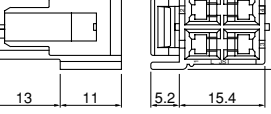
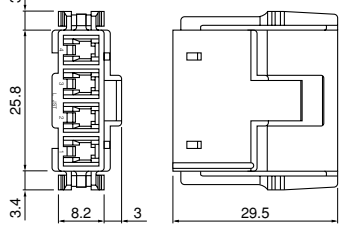
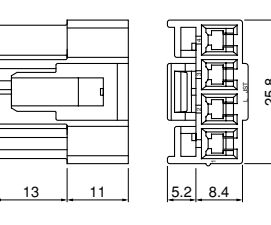
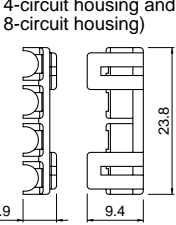
<Outer-housing lock>



VL CONNECTOR

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

RoHS compliance

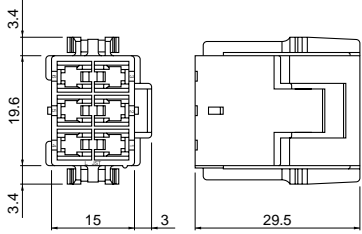
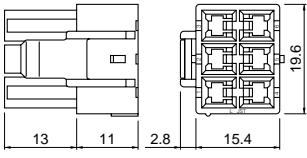
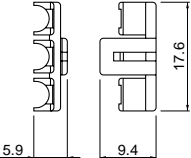
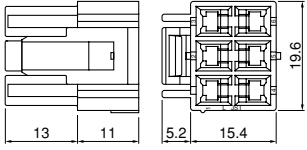
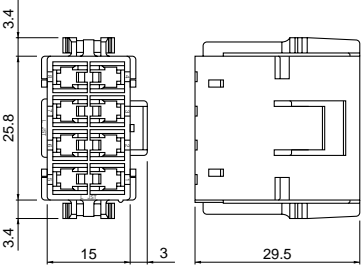
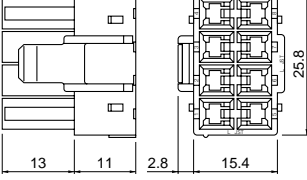
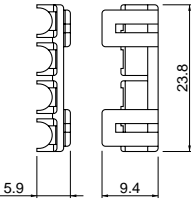
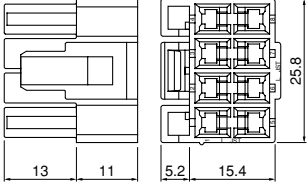
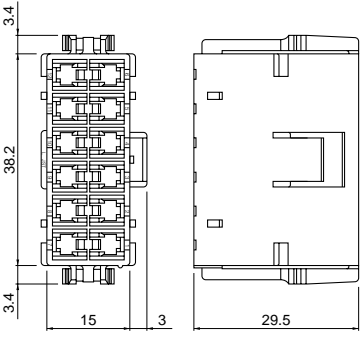
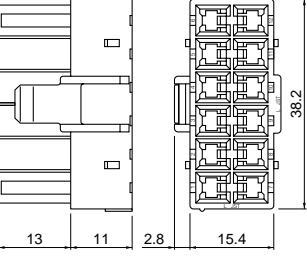
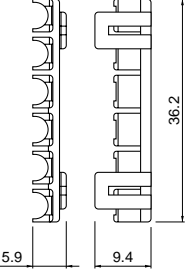
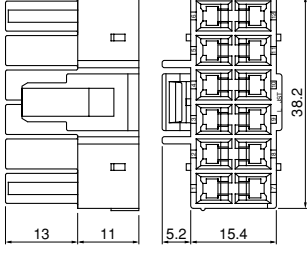
Note: 1. Contact JST for special products.

2. Contact JST for Glow Wire compliant connectors.

VL CONNECTOR

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

RoHS compliance

Note: 1. Contact JST for special products.
2. Contact JST for Glow Wire compliant connectors.