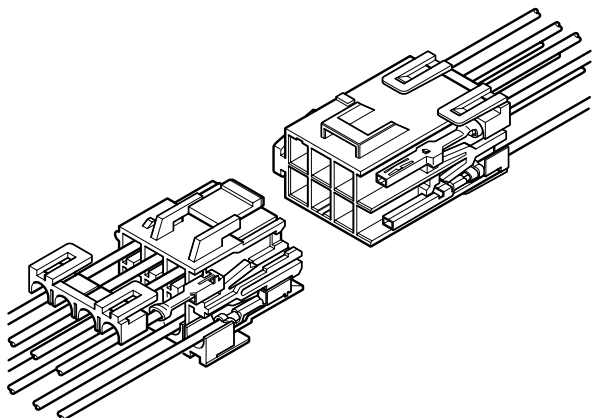


VL CONNECTOR

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 3.5mm²
- 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.

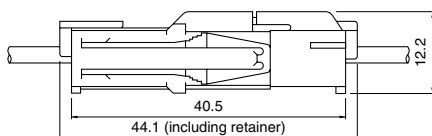
Current unit: A

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

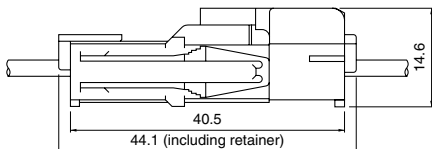
Panel layout and Assembly layout

(2, 3 and single-row 4 circuits)

<Inner-housing lock>

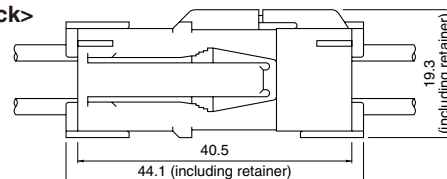


<Outer-housing lock>

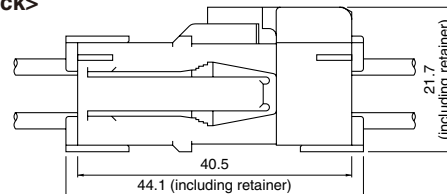


(4, 6, 8 and 12 circuits)

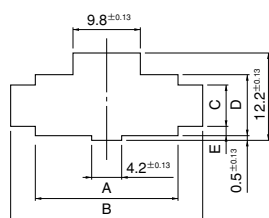
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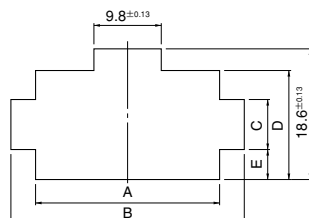
<Outer-housing lock>



Shape I



Shape II



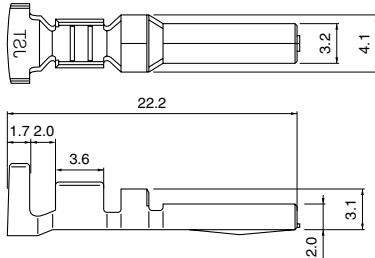
Circuits	Receptacle housing Model No.	Panel hole shape	Panel hole dimensions (mm)					Applicable panel thickness (mm)
			General tolerance A, B, D: ±0.13 C, E: ±0.1					
2	VLR-02V	I	13.8	20.6	5.7	8.5	1.4	0.5~2.0
3	VLR-03V	I	20.0	26.8	5.7	8.5	1.4	
4	VLR-04V	II	13.8	20.6	7.0	15.4	4.2	
4 (Single-row)	VLR-04VN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

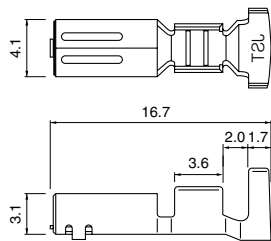
VL CONNECTOR

Contact

Pin contact



Socket contact



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

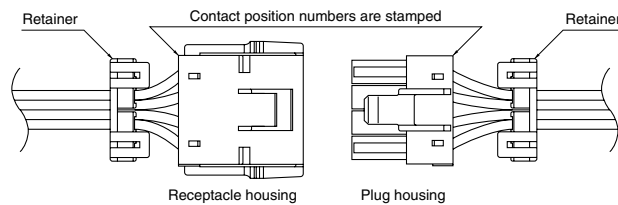
RoHS compliance

Note: 1. Contact JST for special products.

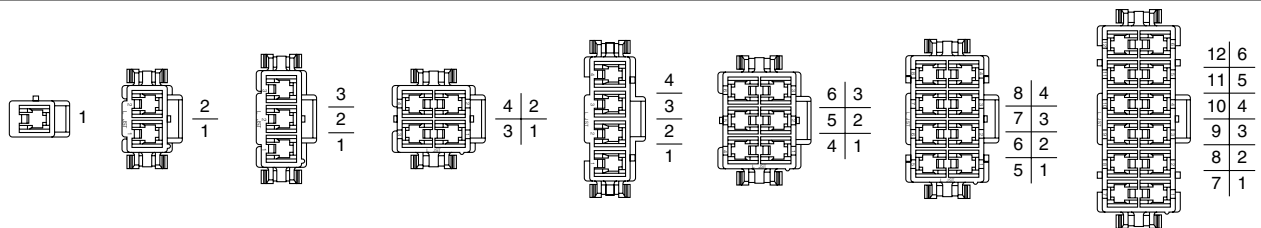
2. *Marked products are not TÜV approved.

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

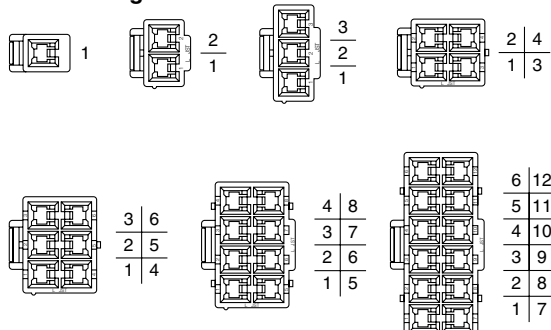


Receptacle housing

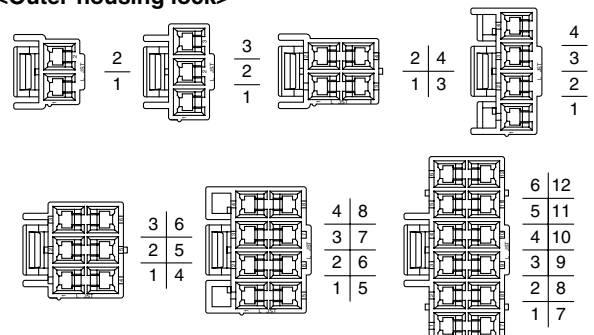


Plug housing

<Inner-housing lock>



<Outer-housing lock>



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

RoHS compliance

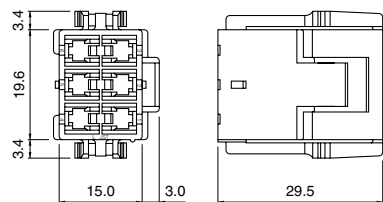
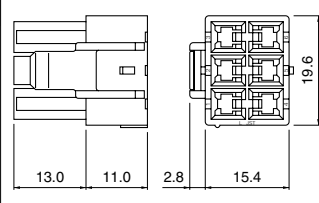
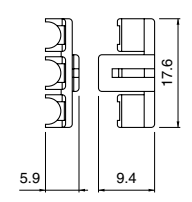
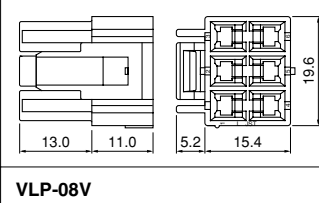
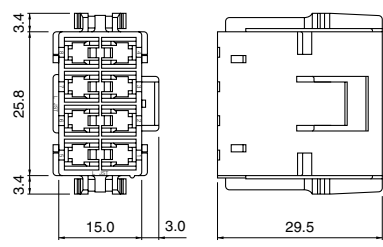
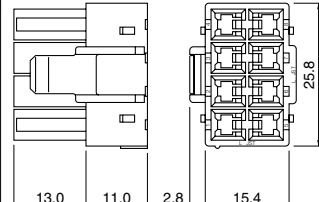
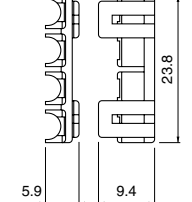
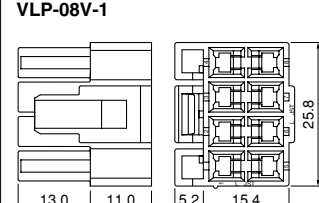
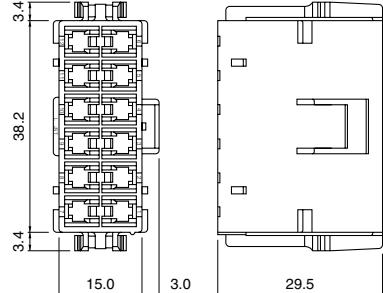
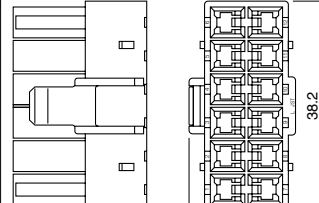
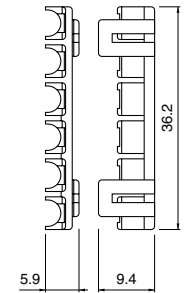
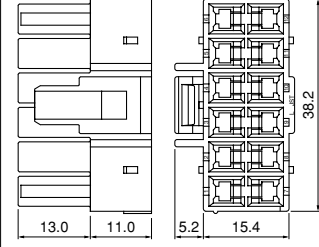
Note: 1. Contact JST for special products.

2. *Marked products are not UL/CSA/TÜV approved. (*1 marked product is not only TÜV approved.)

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 	VLP-06V 	VLS-03V (commonly used for 3-circuit housing and 6-circuit housing) 
				VLP-06V-1 	
8	600V	16A	VLR-08V 	VLP-08V 	VLS-08V (commonly used for 4-circuit housing and 8-circuit housing) 
				VLP-08V-1 	
12	600V	15A	VLR-12V 	VLP-12V 	VLS-12V 
				VLP-12V-1 	

RoHS compliance

Note: Contact JST for special products.