



**GWT Test Report of Val-U-Lok plug housing**

**1. INTRODUCTION**

**1.1. Purpose**

Test was performed on Val-U-Lok series. The purpose of this test is to evaluate the performance of Val-U-Lok series. Test was performed at the TE Shanghai Electrical Components Test Laboratory, Testing was performed on 1969604-4 to determine if it can meet No Flame, and light tissue no ignition or Te-Ti≤2s at 750°C per IEC60335-1 standards.

**1.2. Scope**

This report covers the glow wire test of TE Connectivity (TE) Val-U-Lok series was performed at the Shanghai Electrical Components Test Laboratory. The test file number for this testing is on file and maintained at the TE Shanghai Electrical Components Test Laboratory under TP-22-01608-record.

**1.3. Conclusion**

All part numbers listed in paragraph 1.5 show conformity to GWT performance requirements: No flame and light tissue no ignition or Te-Ti≤2s at 750°C per IEC60335-1 standards.

**1.4. Product Description**

TE Connectivity (TE) Val-U-Lok series are available in 2 – 24 position configurations

**1.5. Test Specimens**

Following part numbers were used for testing (See Table 1).

**Table 1 – Specimen Identification**

Production line	Part Number	Description	Part Revision
Val-U-Lok series	1969604-4	4P FH PLUG VAL-U-LOK FH GW	A

**1.6. Qualification Test Sequence**

**Table 2 – Test Sequence**

Test Item	Test Sequence
Glow wire test	1

**1.7. Environmental Conditions**

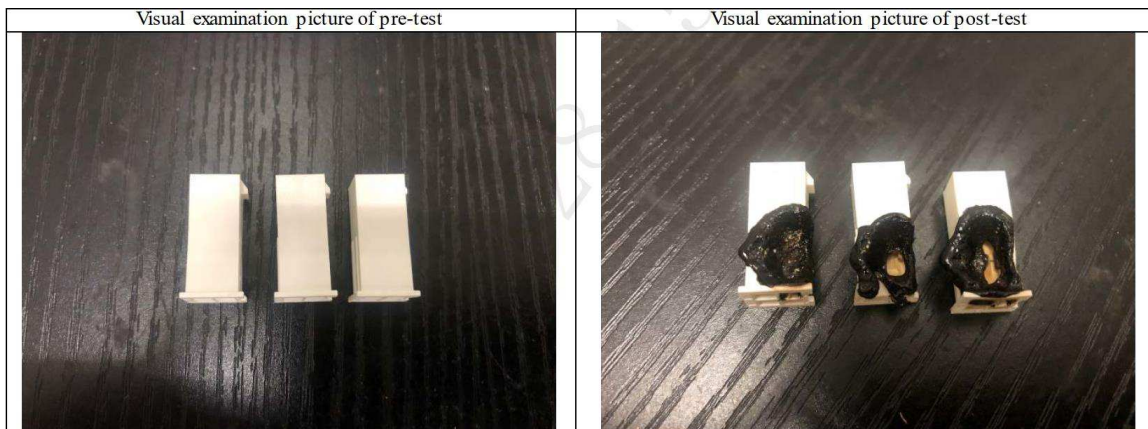
Unless otherwise stated, the following environmental conditions prevailed during testing:

Temperature: 15°C to 35°C  
Relative Humidity: 20% to 80%

**2. SUMMARY OF TESTING**

2.1. 1969604-4 test data

1969604-4



Test item	QTY	Status	Test result						
Examination	6	Final	No physical damage						
			Point of glow tip application (°C )	Ti (sec)	Te (sec)	Flame height (cm)	Drops (Yes/No)	Light tissue paper burns (Yes/No)	Judgment
Glow wire test (1969604-4)	3	Final	750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec
	3	Final	750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec
			750	0	0	0	No	No	Meet spec

### 3. TEST METHODS

Test specimens were subjected to the Glow Wire test per IEC 60335-1-2016 for a duration of thirty seconds at  $750^{\circ}\text{C} \pm 10^{\circ}\text{C}$  with a glow wire penetration depth of 7 mm after being subjected to a temperature of  $25^{\circ}\text{C}$  and relative humidity of 60% for a minimum of 24 hours. Test specimens were orientated whereas not to impede the material from burning up the test specimen or dripping down to the specified layer. The tester observed each test specimen for flame height, flame duration, and burning of the specified layer (light tissue paper) beneath the specimen under test as specified in IEC 60335-1-2016.