PVC FLEXIBLE CORD

1.1 SCOPE

This specification shall be in accordance with EN 50525-2-11

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V

1.2 CONSTRUCTION

CONDUCTOR	ANNEALED COPPER WIRE	
INCLUATION	PVC (BLUE, BROWN,YELLOW/GREEN)	
INSULATION	MEAN VALUE OF THICKNESS: Min.0.6mm	
SHEATH	PVC MEAN VALUE OF THICKNESS: Min.0.8mm	

ITEM		UNIT	SPEC.VALUE
RATED VOLTAGE (Uo/U)		V/V	300/500
NO.OF CORE		NO.	3
CONDUCTOR	NOMINAL AREA	mm ²	0.75
	CONSTRUCTION	NO/mm	32/0.18 or 24/0.2
THICKNESS OF INSULATION		mm	0.6
THICKNESS OF SHEATH		mm	0.8
OVERALL DIAMETRT(APPROX.)		mm	6.8±0.2
CONDUCTOR RESISTANCE (AT20°C)		Ohm/km	26.0 (Max)
TEST VOLTAGE		V/min	2000/15

1.3 SOURCE FOR FLEXIBLE CORD

- RHYTHM
- LIAN DUNG
- I-SHENG

1.4 PHYSICAL CHARACTERISTICS OF INSULATION AND SHEATH

ITEM			UNIT	SPEC.VALUE
	ORIGINAL	TENSILE STRENGTH	kgf/ mm²	Min.1.3
INICLII ATIO		ELONGATION	%	Min.150
INSULATIO N	AFTER AGING	TENSILE STRENGTH	%	VARIATION FROM ORIGINAL VALUE 20
	80±2°C FOR 168 HOURS	ELONGATION	%	VARIATION FROM ORIGINAL VALUE 20
SHEATH	ORIGINAL	TENSILE STRENGTH	kgf/ mm²	Min.1.3
		ELONGATION	%	Min.150
	AFTER AGING	TENSILE STRENGTH	%	VARIATION FORM ORIGINAL VALUE 20
	80±2°C FOR 168 HOURS	ELONGATION	%	VARIATION FROM ORIGINAL VALUE 20

1.5 COLD BEND

No crack on the surface of cord sample which is wind round 6 turns in mandrel of 4-5x \varnothing d (\varnothing d : wire diameter) subjected to a temperature of $-15\pm2^{\circ}\mathbb{C}$ for 4hours.

1.6 HEATBEND

No crack on the surface of a sample which is wind round 6 turns on mandrel of 9mm diameter subjected to a temperature of $150^{\circ}\text{C}\pm2^{\circ}\text{C}$ for 1hour.

1.7 DEFORMATION RESISTANCE AT HIGHER TEMPERATURE TEST

The test temperature is $70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 4hours.The test weight is 125g for insulation and 175g for sheath by CEE Test Machine (pressure foot). Test result: Thickness variation from original value min.50%.

2. PLUG

2.1 SCOPE

The plug shall be in accordance with BS1363: 1995.

(Specification for plugs, switched and unswitched socket-outlets)

2.2 CONSTRUCTION

The plug construction shall be in accordance with our Catalogue NO.LT-327(3A) (HO-100) Assembly Type

2.3 CHARACTERISTICS

N0	TEST ITEM	SPEC.VALUE	TEST RESULTS
1.	Moisture	Samples are kept in a humidity	No damage
	resistance test	cabinet containing air with a relative	
		humidity between 91 to 95% and a	
		temperature of 20-30℃ for a duration	
		of 48 hours	
2.	Electric strength	A voltage of A.C.2000V is applied for	No flashover
	test	2-3 sec after the moisture resistance	and breakdown
		test.	
3.	Insulation	This test is measured with a D. C.	Min. 5 M Ohm
	resistance test	500V after the moisture resistance	
		test.	
4.	Flexing test	The sample shall be loaded with a	No damage
		weight of 10N(1.02kg) and the	
		oscillating number shall be moved	
		backward and forward through an	
		angle of 90°(45°on either side of the	
		vertical) the number of flexing being	
		10,000.The sample is turned through	
		90°after 5000 flexings.	
5.	Tumbling test	The samples are dropped from a	No damage
		height of 50cm onto a plywood base	
		(10mm thick) for a total of 1000	
		times.	

6.	Cold test	The samples are kept in a refrigerator at a temperature of -15 $\pm2^{\circ}$ C, for 1 hour.	No damage
7.	Abrasion test	The pin of sample slopes downwards at angle of 10° to the horizontal. The sample is loaded with a force of 4N on the pin. The number of movement is 2000, and the length of pin subjected to abrasion is approximately 7mm over the insulating sleeve.	Ü
8.	Heat deformation test	The samples are kept for 1 hour in a heating cabinet at temperature of $70\pm2^{\circ}$ C.	No damage

3 CONNECTOR

3.1 SCOPE

The connector shall be in accordance with BS-4491 \cdot IEC 320 C13 (Appliance coupler)

3.2 CONSTRUCTION

The connector construction shall be in accordance with our Catalogue NO.LT-501

3.3 CHARACTERISTICS

NO.	TEST ITEM	SPEC. VALUE	TEST RESULTS
1.	Moisture resistance test	Samples are kept in a humidity cabinet containing air with a relative humidity between 91 to 95% and a temperature of $20{\sim}30^{\circ}{\rm C}$ for a duration of 48 hours.	No damage
2.	Electric strength test	A voltage of A.C.2000V is applied for 1 min. after the moisture resistance test.	No flashover and breakdown
3.	Insulation resistance test	This test is measured with a D.C.500V after the moisture resistance test.	Min.5 M Ohm.
4.	Flexing test	The sample shall be loaded with a weight of 10N (1.02kg) and the oscillating number shall be moved backward and forward through an angle of 90°(45° on either side of the vertical) the number of flexing being 20,000. The sample is turned through 90° after 5000 flexing.	No damage
5.	Tumbling test	The sample are dropped from a height of 50cm onto a plywood base (10mm thick) for a total of 1000 times	No damage
6.	Cold test	The samples are kept in a refrigerator at a temperature of -15 \pm 2 $^{\circ}$ C,for 1 hr.	No damage
7.	Heat deformation test	The samples are kept for 1 hour in a heating cabinet at temperature of $70\pm2^{\circ}$.	No damage





