



TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING

Cords for applications requiring high flexibility IEC 60245 - 8 1. Edition (1998-01)+Am.1(2003-12)

R=Required by Lab

S=May be subcontracted

Ref. No.	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
In general		Testing equipment according to IEC 60245-2 and additional tests.	
IEC60245-8 Sub clause 4.4	Measurement of core lay length	Suitable measuring device, e.g. vernier calliper	R
IEC60811-1-2 Sub Clause 8.2	Tensile test after ageing in the air bomb	Tensile machine, equipment for punching dumb-bell test pieces equipment for cutting or grinding the insulation to obtain 2 parallel surfaces. Optical measuring device / dial gauge. Air bomb	R
IEC60811-2-1 Sub Clause 8	Ozone resistance test	A device for generating a controlled amount of ozone. A means for circulating ozonized air under controlled conditions of humidity and temperature through a chamber containing the test pieces to be tested. A means for determination of ozone concentration. A suitable device for the clamping and elongation of test pieces. Cylindrical mandrels consisting of wood or metal. A desiccator filled with silica gel or equivalent material. An accurate laboratory balance reading to 0,1mg.	R
IEC 60811-3-2	Loss of mass test for insulation and	Air oven with natural air flow, airflow rate: 8...20 complete air	R



Sub Clause 8.1	sheath.	changes per hour. Analytical balance with a sensitivity of 0,1 mg. Punching dies for dumb-bell test pieces. Desiccator with silica gel or similar material.	
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IEC 60811-3-1 Sub Clause 9.1 and Sub Clause 9.2	Heat shock test for insulation and sheath.	Mandrels with different diameter. Air oven.	R
IEC 60811-3-1 Sub Clause 8.1 and Sub Clause 8.2	Pressure test at high temperature for insulation and sheath.	Indentation device with a blade (0,7 ± 0,01)mm wide, loads (weights), supports, air oven, microscope or profile projector with two decimal places.	R
IEC 60811-1-4 Sub Clause 8.1 and Sub Clause 8.2	Cold bending test for insulation and sheath.	Cold bend test apparatus consisting essentially of a revolving mandrel and guiding devices for the test pieces. Refrigerator, mandrels with different diameters.	R
IEC 60811-1-4 Sub Clause 8.5	Impact test at low temperature.	Impact test apparatus, refrigerator, hammers.	R
IEC 60332-1	Test of flame retardance.	Propane gas burner, 3-sided metallic screen 1200 mm high, 300 mm wide and 450 mm deep with open front and closed top and bottom.	R
IEC60245-8 Annex B	Coverage by textile braid.	Vernier calliper.	R