

# Cable systems and harnesses

/ Testing capabilities

# Electrical

- Automatic tester

- Point to point + Continuity (2 and 4-wire) (4V DC)
- HV DC Dielectric Withstand up to 2kV, DW max current – 1,5mA
- HV DC Insulation Resistance up to 1GOhm, 120s per connection net

- Manual tester

- HV DC Dielectric Withstand up to 6kV, max current 11mA
- HV AC (50 – 60Hz) Dielectric Withstand up to 5kV, max current up to 42mA
- HV Insulation Resistance up to 1TOhm, 5kV DC
- Ground Bond up to 32A AC, 6V AC max (Open Circuit)
- Continuity 4-wire resistance tests
- Partial discharge measurement\*
- Background noise round 2 pC – measurement up to 50kV\*
- HV test up to 100 kV with step 200V\*

- Fibre optic

- Singlemode and Multimode, core sizes 1.25 mm, 1.6 mm, 2.0 mm, 2.5 mm:
  - PC ferrule: ROC
  - Apex Offset
  - Fiber Height
  - Back reflection\*
  - Insertion Loss @ 850nm, 1300nm\*\*

- RF test

- Frequency 100kHz to 3.6 GHz, 50 Ohm Impedance:
  - Standing Wave Ratio
  - Attenuation
  - Crosstalk
  - Propagation time

- LCR test

- At frequency 100Hz/120Hz/1kHz/10kHz/100kHz

# Mechanical

- Bending test
  - From 0° to 90° to 0° - with weight (max 5 kg) and max speed 30 cycles/min
- Tensile test
  - Up to 10kN - max sample length 500 mm
- Fatigue test
  - Performed with rotation rig, with continuous electrical continuity test
- Material adhesion
  - According to ISO standard
- Material stretching
  - Sample 50 mm long, range 10 mm, 200 cycles/min
- Roughness test
- Hardness test
- Vibration/mechanical shock\*
- Abrasion\*

# Enviromental and other

- Hydrostatic pressure
  - Up to 130 bars
- Cycling pressure
  - From 0 to 100 bars; duration from 50 to 360 min; up to 10 000 cycles
- Climatic test
  - Performed in climatic chamber
  - Possible electrical tests inside the chamber
  - Combined with pressure and/or humidity\*
- Temperature in air and in water
  - Range from -60°C to +210°C
- Storage in air
- Thermal shock
  - Range from -60°C to +210°C
- X-Ray\*





## **What is your challenge?**

Whatever it is, we can find the solution.  
Contact us today to see how we can help.

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