Quality criteria for Cables and Cable assemblies

1.0 Standard.

1.1 Viamed is certified to ISO9001/EN46001 and needs to be supplied with product that will meet the criteria set by the notified bodies and and when used in Viamed products and/or services will meet all EU standards.

2.0 Visual Checks

- 2.1 All cables and assemblies must conform to all physical dimensional specifications as per assembly drawing
- 2.2 All cable and assemblies must conform to all mechanical, material and electrical specifications
- 2.3 Visual inspection should be carried out in approved (local legal requirements) lighting conditions at reading distance (25cm to 40 cms) 10 to 18 inches for sufficient time to ensure a complete inspection.
 - Additional magnification may be necessary for complete inspection of moulding and/or connector abnormalities

3.0 Cable Jacket.

- 3.1 The cable jacket should be uniform in colour
- 3.2 There should be no loose material
- 3.3 Inner conductors should not be visible through the jacket.
- 3.4 The jacket should be round and a snug fit on the inner conductors
- 3.5 The cable jacket should show no evidence of burns or overheating

Signs of burning on cable jacket

3.6 The cable jacket should not have signs of flaring due to overheating

Flaring of Insulation

- 3.7 The cable jacket should not have melted insulation, or insulation pulled back from the conductor jacket
- 3.8 The cable jackets should be cut square so that no strips remain.

Incomplete stripping of insulation



3.9 The outer jacket should not have any scratches, cuts or damage that expose the inner conductors.

Nicks or cuts that expose the inner conductors

- 3.10 Colour variations or stains must be limited
 - a) not less than 20 cms (8 inches) apart
 - b) maximum of three on any one cable
 - c) stain size should be less than 0.35 mm x 0.35 mm
- 3.11 The cable should be free from nodules or limited to
 - a) not less than 20 cms (8 inches) apart
 - b) nodule size should be less than 0.1 mm
 - c) Maximum of three per cable
- 3.12 Discoloured nodules or nodules due to foreign material should be rejected.
- 3.13 Inner conductors must not be damaged or kinked after exiting the strain relief.

Kinked conductor emerging from strain relief

1.0 Connector & Strain relief

- 4.1 pits must be less than 0.2 mm in diameter and no nearer than 0.2 mm from any other pit
- 4.2 no more than 4 pits are allowed
- 4.3 connector must not be deformed

Deformation and voids

- 4.4 connector must be able to be installed into a mating connector
- 4.5 Incomplete moulding on the connector must not be greater than 0.5 mm or expose underlying material
- 4.6 Incomplete moulding on the strain relief must nit exceed 25% of the moulded are or be in such an area to affect the security of the strain relief when it is added into a housing.
- 4.7 Scratches on the top of the connector must be less than 0.1 mm wide and 0.3 mm long
- 4.8 Each scratch must be separated by at least 0.5 mm
- 4.9 The combined length of all scratches must not exceed 1.5 mm and scratches must be separated by at least 0.5mm
- 4.10 Foreign material must not be more than 0.3 mm in diameter
- 4.11 A maximum of two is acceptable
- 4.12 Foreign material blemishes should be separated by 1.5 mm

z:\main\cemark\spoprobe\ M cable QA



- 4.13 Foreign material below the surface may not become loose
- 4.14 Flash must not protrude more than 0.2 mm from the body of the device
- 4.15 Ejector pin marks should not be indented or protrude more than 0.1 mm