These cables are intended for space use and could be manufactured with different control level:

-AQ, AQR or AQS for Space use or

### Electrical Characteristics

- **Voltage Rating**: 600 V. RMS.
- **Voltage Test**: 100% Impulse test
- **Insulation resistance (500 V = 1 mn)**: > 5000 MΩ x Km. at 20°C
- **Surface resistance (25 mm between Electrodes)**: > 125 MΩ x mm
- **Spiral shield with OFHC SPC - Coverage Factor**: > 92%

### Construction

**Cores:**

1. Stranded conductors OFHC Silver Plated Copper 2 µm. Silver thickness
2. 2 PTFE tapes wrapped in reverse direction with 50% mini overlap

**Above cores could be:**

- Twisted
- Twisted, shielded and jacketed

3. Spiral shield with OFHC SPC Silver thickness ≥ 2 µm Coverage ≥ 92%

4. FEP coated polyimide tape and a PTFE tape with an overlap of 20% min.
**Thermal Characteristics**

- **Temperature rating**: -100°C at +200°C (Peak at +260°C)
- **Shrinkage**: After 6 Hour at 230°C, Shrinkage < 2 mm.
- **Cold bend**: 4 Hour at - 80°C (On 10 times O.D.)
- **Heat ageing**: 120 Hour at 230°C.

**Physical and Chemical characteristics**

- **Wall thickness of insulation**: 0.24 mm
- **Concentricity**: Good with a wrapped construction.
- **Fluids resistance**: Solvants, Oils, Hydrocarbons, Skydrol, concentrated acid, Propellant, Dimethylhydrazine (UDMH)
- **Non Flammable**
- **Good radiation resistance**

These cables are specially designed to be stripped with a thermal device in order to avoid any damage on conductor.

**Identification Code**:

```
xxxx  x  xx  xxxx → Level of Control : AQS - AQ R - AQ
```

**Packaging**:

- **Minimum length**: 30 m
- **Cable cleaned, wound on reels with spool hub at least 70 times the maximum external diameter for single wire and 30 times for multiconductor cable.**
- **The wires spools are heat-sealed into polyethylene bags with a humidity indicator inside. Ends are sealed with caps and accessible over a length of 10 cm.**

**Color coding**:

**Single wire**:

- Standard color is white for all gages
- On request we can propose the followings colors:
  - Brown, Red, Yellow, Green, Blue, Grey, Orange, Green

**Multiconductor**:

- Standard color is white for all gages
- On request we can propose the followings colors:
  - 2 cores: White - Blue
  - 3 cores: White - Blue - Orange
- In any case, jacket color will be pink with helical colored stripes. The number of stripes corresponds to the number of conductors.
  - Red stripe for 22 AWG.
  - Green stripe for 20 AWG
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<th>AWG</th>
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<th>Cross Section (mm²)</th>
<th>Construction</th>
<th>Nom. Dia. (mm)</th>
<th>Max. Dia. (mm)</th>
<th>Ohmic Résist. at 20°C (Ω/Km)</th>
<th>Nexans Reference*</th>
<th>Nom. Dia. (mm)</th>
<th>Max. Dia. (mm)</th>
<th>Max. Weight (g/m)</th>
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**Final Production Control**: According to ESCC. 3901 and BEP 5691.

- *Add the control level symbol (AQS - AQ R – AQ )

S.P.C. = Silver Plated Copper
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