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ORIGINATOR: A.J.R.

## SPECIFICATION DATA SHEET

### CABLE TYPE

PTFE INSULATED EQUIPMENT WIRE

### GENERAL DESCRIPTION

SILVER AND NICKEL PLATED COPPER CONDUCTORS,  
PTFE INSULATED TYPE A (SPCW) AND NA (NPCW).

### RELEVANT STANDARDS

BS 3G 210 : 1996

| E.P.N. Number              | Conductor Details |                   |             |                            | Insulation Thickness |              | Overall Diameter |              | Conductor Resistance ( $\Omega/\text{km}$ @ 20°C) |               | Mass            | Long term current rating |
|----------------------------|-------------------|-------------------|-------------|----------------------------|----------------------|--------------|------------------|--------------|---------------------------------------------------|---------------|-----------------|--------------------------|
|                            | Size<br>AWG       | Stranding<br>(mm) | O/D<br>(mm) | Area<br>(mm <sup>2</sup> ) | Min.<br>(mm)         | Nom.<br>(mm) | Min.<br>(mm)     | Max.<br>(mm) | SPCW<br>(Max)                                     | NPCW<br>(Max) | Max.<br>(kg/km) | Max.<br>*(A)             |
| *S for SPCW<br>*N for NPCW |                   |                   |             |                            |                      |              |                  |              |                                                   |               |                 |                          |
| HP30*AA.                   | 30                | 01/0.250          | 0.25        | 0.049                      | 0.10                 | 0.15         | 0.45             | 0.60         | 377.00                                            | 387.00        | 0.96            | 2.0                      |
| HP28*AA.                   | 28                | 01/0.320          | 0.32        | 0.080                      | 0.10                 | 0.15         | 0.52             | 0.67         | 229.00                                            | 234.00        | 1.32            | 3.0                      |
| HP26*AA.                   | 26                | 01/0.400          | 0.40        | 0.126                      | 0.10                 | 0.15         | 0.60             | 0.75         | 146.00                                            | 148.00        | 1.83            | 4.0                      |
| HP22*AA.                   | **22              | 01/0.600          | 0.60        | 0.283                      | 0.10                 | 0.15         | 0.80             | 0.95         | 64.30                                             | 65.00         | 3.88            | 7.0**                    |
| HP32*BA.                   | 32                | 07/0.080          | 0.24        | 0.035                      | 0.10                 | 0.15         | 0.44             | 0.59         | 558.00                                            | 605.00        | 0.84            | 1.5                      |
| HP30*BA.                   | 30                | 07/0.100          | 0.30        | 0.055                      | 0.10                 | 0.15         | 0.50             | 0.65         | 353.00                                            | 377.00        | 1.10            | 2.0                      |
| HP28*BA.                   | 28                | 07/0.120          | 0.36        | 0.079                      | 0.10                 | 0.15         | 0.56             | 0.71         | 244.00                                            | 258.00        | 1.40            | 3.0                      |
| HP26*BA.                   | 26                | 07/0.150          | 0.45        | 0.124                      | 0.10                 | 0.15         | 0.65             | 0.80         | 159.00                                            | 166.00        | 1.96            | 4.0                      |
| HP24*BA.                   | 24                | 07/0.200          | 0.60        | 0.220                      | 0.10                 | 0.15         | 0.80             | 0.95         | 88.30                                             | 91.20         | 3.04            | 6.0                      |
| HP26*CA.                   | 26                | 19/0.100          | 0.50        | 0.149                      | 0.10                 | 0.15         | 0.70             | 0.85         | 130.00                                            | 139.00        | 2.26            | 5.0                      |
| HP24*CA.                   | 24                | 19/0.120          | 0.60        | 0.215                      | 0.10                 | 0.15         | 0.80             | 0.95         | 89.80                                             | 94.90         | 2.99            | 6.0                      |
| HP22*CA.                   | 22                | 19/0.150          | 0.75        | 0.336                      | 0.10                 | 0.15         | 0.95             | 1.10         | 58.60                                             | 61.30         | 4.41            | 8.0                      |
| HP20*CA.                   | 20                | 19/0.200          | 1.00        | 0.597                      | 0.10                 | 0.15         | 1.20             | 1.35         | 32.50                                             | 33.60         | 7.19            | 11.0                     |

\*Current ratings are based on a temperature rise of 40°C (single wire in free air)

\*\*Not an actual size within the BS3G210 specification

### CABLE CHARACTERISTICS

#### VOLTAGE RATING:

300 V rms

#### TEMPERATURE RATING:

-75°C to +190°C for SILVER plated copper conductors  
-75°C to +260°C for NICKEL plated copper conductors

PTFE is unaffected by oils, lubricants, hydraulic fluids and aircraft fuel. The material is non flammable, resistant to solder iron damage and is highly flexible. Although widely used for high performance aerospace applications, PTFE wires are used in environments where the demands, whether thermal, electrical or mechanical, are severe. Available in 11 basic colours Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White, Pink (plus natural) along with bi- and tri- colour combinations. PTFE Insulation is applied either by extrusion, or by spiral lapping and sintering.

All extruded wire sizes/colours are RoHS compliant

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