

Specialist High-Performance Solutions

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

| Heatsense Part | Conductor Details | | | | Insulation | | Overall | | Conductor | | Mass | Long term |
|----------------|-------------------|-----------|------|-------|------------|------|----------|------|---------------|--------|---------|-----------|
| Number | | | | | Thickness | | Diameter | | Resistance | | | current |
| | | | | | | | | | (Ω/km @ 20°C) | | | rating |
| *S for SPCW | Size | Stranding | O/D | Area | Min. | Nom. | Min. | Max. | SPCW | NPCW | Max. | Max. |
| *N for NPCW | AWG | (mm) | (mm) | (mm²) | (mm) | (mm) | (mm) | (mm) | (Max) | (Max) | (kg/km) | *(A) |
| HSP30*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 |
| HSP28*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 |
| HSP26*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 |
| HSP22*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** |
| HSP32*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 |
| HSP30*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 |
| HSP28*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 |
| HSP26*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 |
| HSP24*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 |
| HSP26*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 |
| HSP24*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 |
| HSP22*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 |
| HSP20*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)

CABLE CHARACTERISTICS

VOLTAGE RATING: 300 V rms

TEMPERATURE RATING: Industry Rated as -75°C to +200°C for SILVER plated copper conductors,

(Restricted Rating of +190°C Maximum as per BS3G210 Specification).

-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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^{**}Not an actual size within the BS3G210 specification