



### Siechem AERO 44 1000V Single Core Dual Wall Insulated Primary Wires

**AERO 44**

#### Application

- ✓ Hook up and signal wire and cable used in aircraft, avionics, military electronics, satellites helicopters, ships, mass transit, offshore platforms, and automobiles.

#### Features

- ✓ Insulation does not shrink in hostile working environment.
- ✓ AERO 44 wires have 40% greater cut through resistance than some of the thickly insulated wires.
- ✓ Dual wall constructions.
- ✓ 600, 1000 and 2500 voltage rating.
- ✓ Small size and light weight.
- ✓ No melting or dripping due to prolonging excess heat, because of EBXL process.
- ✓ Resistance to soldering iron & over load.
- ✓ Excellent chemical resistance to many acids, carbon solvents, fuels, lubricants, missile fuels, oxidizers etc.
- ✓ Temperature rating -65°C to + 200°C [-85°F to + 392°F] stable installed performance in very hot, extremely cold and available with low outgassing characteristics for use in an environment of high vacuum and high temperature.
- ✓ Outstanding electrical arc tracking resistance in wet and dry conditions.
- ✓ Very low toxic.
- ✓ Prevents cold flow of the insulations.
- ✓ Excellent scrape abrasion.
- ✓ Good flexibility.
- ✓ RoHS Compliant.

#### Product Construction

- ✓ Conductor : Annealed Tinned Copper Conductor (Optional : Silver Coated Copper Conductor / Nickel Coated Copper Conductor)
- ✓ Insulation : Dual Wall Radiation Cross-Linked Specially Formulated Polyalkene Extruded & Radiation Cross-Linked Improved PVDF (Polyvinylidene Fluoride)
- ✓ Single core :
- ✓ Colour : As Per Customer Order.

#### Technical Data

- ✓ Temperature Rating
  - i) Tin Plated Conductor : -65°C to + 150°C
  - ii) Silver or Nickel Plated Conductor : -65°C to + 200°C
- ✓ Voltage Rating (Thin wall) : 1000V, light weight
- ✓ Tensile Strength : 28 N/mm<sup>2</sup>
- ✓ Elongation of Insulation : 230%
- ✓ Shrinkage, 200°C : < 1%
- ✓ Low Temperature Bend : -65°C [-85°F]
- ✓ Flammability : Pass
- ✓ Resistance : Pass (fuels, oils, solvents)
- ✓ Smoke/Toxicity Index
  - i) Smoke index : 6 per meter of wire
  - ii) Toxicity index : 0.8 per meter of wire
  - iii) Oxygen index : 30% Oxygen
  - iv) Temperature index : > 300°C [572°F]

#### Standards

- ✓ MIL-W-81044, MIL-C- 27500, MIL-C 7078 MIL -W- 16878, MIL-W-22759 MIL-STD-104, MIL-STD-681, MIL-STD-1916
- ✓ VG 95218 Parts 20, 21, 22, 23 and 1000.
- ✓ MSV34401
- ✓ BS G210, BS 4066
- ✓ TDE 74/P/74 and TDE 75/R/6
- ✓ S424 14751
- ✓ Def - Stan. 61-12 Part 18 Issu4/Part 26 Issue 3
- ✓ NFC 32070
- ✓ NES 714, NES 715
- ✓ ASTM E 595
- ✓ NEMA WC 27500

**ISO  
9001**
**ISO  
14001**
**ISO/TS  
16949**
**OHSAS  
18001**


Part Number	Wire Size (AWG)	Cross Section Area (Sq.mm)	No. of Strands (Nos.)	Diameter of Single Wire (Nom.) (mm)	Overall Diameter (Nom.) (mm)	Cable Weight (Max.) (kg/km)
44G21085XXYY	26	0.13	19	0.10	1.04	2.38
44G21084XXYY	24	0.20	19	0.13	1.19	3.57
44G21083XXYY	22	0.33	19	0.16	1.39	5.20
44G21082XXYY	20	0.52	19	0.20	1.59	7.59
44G21081XXYY	18	0.82	19	0.25	1.87	11.46
44G21080XXYY	16	1.31	19	0.29	2.08	14.58
44G21079XXYY	14	2.08	19	0.36	2.51	21.88
44G21078XXYY	12	3.31	37	0.32	2.99	32.89
44G21077XXYY	10	5.26	37	0.40	3.73	52.98
44G21076XXYY	8	8.37	133	0.29	5.25	91.97

Note : XX\* & YY\* : Please add last two digits in the part number as per the colour code given hereunder replacing XX & YY while ordering.

Red - 01	Yellow - 02	Blue - 03	Black - 04	Green - 05	Grey - 07	Brown - 08	White - 09	Orange - 10	Violet - 11
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**Siechem Wires & Cables Meet EU RoHS Directive**

Lead Free	Hg Free	Cd Free	Cr <sup>6+</sup> Free	PBB Free	PBDE Free
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