

Technical Data Sheet

Buried Service Wire | Multi-pair

Pair Count 1 - 6P

Outside Plant Copper Cable - Exchange Cable

Description

4SProducts BSWire® is filled, double-jacketed wire designed for direct burial applications and available in 2, 3, and 6 pair sizes. The primary application of a Buried Service Wire is service entrances and distribution circuits. It is filled with PIB base jelly compound, which is chemically and electrically compatible with all other materials in the wire. The compound completely coats each insulated conductor and fills the air space between conductors.

Conductors: Solid annealed copper in 19, 22 and 24 AWG.

Insulation: Each conductor is insulated with solid high-density polyethylene in distinctive colors.

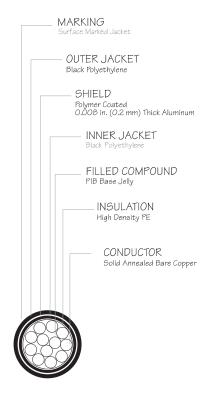
Core Assembly: Individual conductor dimensions are tightly controlled to limit resistance unbalance of twisted pairs. Pair twist lays are varied to minimize crosstalk and meet capacitance unbalance limits. The wire core is completely filled with PIB base jelly such as BP Naptel 867, filling the air spaces between insulated conductors.

Inner Jacket: A black, linear low-density polyethylene inner jacket provides additional mechanical and moisture protection.

Shield: A smooth, copolymer-coated, 8 mil aluminum tape is applied longitudinally over the inner jacket and is bonded to the outer jacket. The space under the tape is flooded to eliminate all air space.

Outer Jacket: A black, linear low-density polyethylene outer jacket provides a tough, flexible, protective covering that withstands exposure to sunlight, atmospheric temperatures, ground chemicals and stresses expected in standard installation.

Cable cut-away



Qualifications & Approvals

Manufactured to meet requirements of ANSI/ICEA S-86-634-1996.

Electrical Specifications

Average Mutual Capacitance @ 1000 Hz										
		nF/mile		nF/km]				
Maximum Individual		94		58						
Wire Average		83 ± 7		52 ± 4						
Conductor Size		Minimum Insulation Resistance		Maximum Individual Attenuation		Maximum Individual Conductor DC Resistance		Resistance Unbalance	Stre D	ectric ngth OC ial Volts
		68 °F (20 °C)		68 °F (20 °C) 772 kHz		68 °F (20 °C)		Maximum	Mini	mum
AWG	mm	gigohm/ mile	gigohm/ km	dB/kft	dB/km	ohms/mile	ohms/km	Individual pair %	Cdr to Cdr	Cdr to Sprt. Wire
19	0.90	1.0	1.6	3.2	10.0	45.0	28.0	5.0	7,000	20,000
22	0.64	1.0	1.6	4.6	15.1	91.0	56.4	5.0	5,000	20,000
24	0.50	1.0	1.6	5.8	19.0	144.0	89.5	5.0	4,000	20,000

Crosstalk Loss	dB/kft	dB/km	Capacitance Unbalance @1000 Hz	ρF/kft	ρF/km
Min. FEXT @ 150 kHz	63	58	Max. Pair-to-Pair	80	145
Min. NEXT @ 722 Khz	44 ((dB)	Max. Pair-to-Ground	800	2,625



1st iSSU