



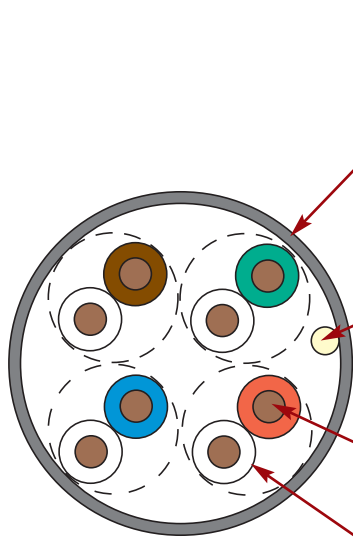
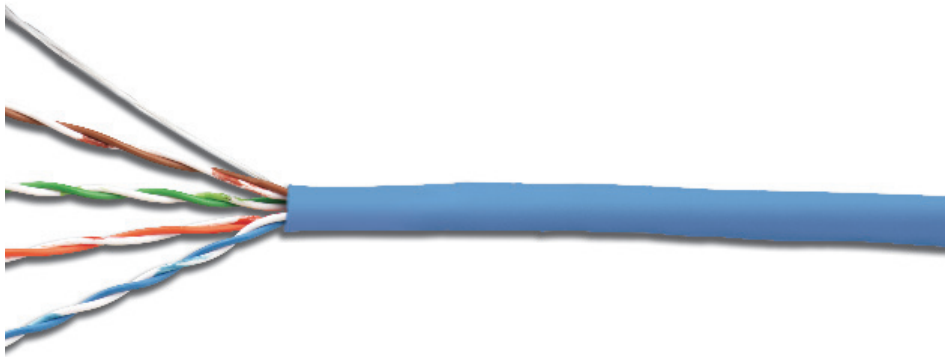
# SOLUTION 6™ UTP CABLE — PLENUM (US)

Solution 6 cable meets or exceeds all ANSI/TIA and ISO/IEC category 6 transmission performance specifications. Combine our high performance category 6 connectivity with Solution 6 cable and the result is a system with excellent electrical performance for optimum applications support.

The Solution 6 Plenum cable design eliminates the central isolation member common to many category 6 UTP cables, reducing overall cable diameter. This reduces pathway size requirements, carton materials and provides more efficient shipping options for a greener installation.



CABLE — US



### Jacket

- Nominal Cable O.D.:  
CMP— 0.192 in.
- Jacket Material:  
CMP— FRPVC

### Rip Cord

- Applied longitudinally under cable jacket

### Conductor

- 0.57mm (0.022 in.) 23AWG solid bare copper

### Insulation

- Conductor Insulation:  
CMP— FEP

### HIGHLIGHTS

- Reverse sequential numbering
- Round jacket
- Jacket material is lead free

### PACKAGING

- 1000 ft. reelex
- Weight — 26 lbs/1000 ft.

### STANDARDS COMPLIANCE

- ISO/IEC 11801:Ed. 2.2 (Category 6)
- ANSI/TIA-568-C.2
- UL CMP and CSA FT6
- RoHS Compliant

### ETHERNET APPLICATIONS SUPPORT

- 1000BASE-T
- 100BASE-T
- 10BASE-T

*Supports any application designed for category 6 or lower cabling*





# PRODUCT INFORMATION

## Solution 6 UTP Cable

### ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38 Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100 - 520 MHz: 100 ± 22%
NVP	CMP— 70%
LCL	30-10log(f/100)dB
Delay Skew	≤ 45ns

### PHYSICAL PROPERTIES

	<b>CMP</b>
Pulling Tension (max)	110N (25 lbf)
Bend Radius (min)	25mm (1 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)

CABLE — US

## Solution 6 Plenum 4-Pair UTP Cable (CMP, CSA Type FT6):

9C6P4-E2-(XX)-RXA.....Plenum, 1000 ft. Reelex

Use (XX) to specify jacket color: **02 = white**, 03 = red, 04 = gray, 05 = yellow, **06 = blue**, 07 = green, 08 = violet, 09 = orange

Cable colors highlighted in red in 1000 ft. package indicate products which are readily available. Other colors may have extended lead times and minimum purchase requirements.

### TRANSMISSION PERFORMANCE



Guaranteed Worst Case:  
Based on category 6 requirements from ANSI/TIA-568-C.2



Siemon Typical:  
Based on worst case test data from a randomly selected cable sample

Frequency (MHz)	Insertion Loss (dB/100m)		NEXT (dB)		PS NEXT (dB)		ACR-N (dB)		PS ACR-N (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
	White	Other	White	Other	White	Other	White	Other	White	Other	White	Other	White	Other	White	Other	White	Other
1	2.0	1.8	74.3	98.8	72.3	96.3	72.3	97.1	70.3	94.6	67.8	88.8	64.8	86.2	20.0	27.1	570	493
4	3.8	3.5	65.3	85.4	63.3	83.6	61.5	81.8	59.5	80.1	55.8	77.4	52.8	75.3	23.0	35.2	552	491
10	6.0	5.6	59.3	75.6	57.3	74.3	53.3	70.0	51.3	68.7	47.8	71.0	44.8	67.8	25.0	34.2	545	487
16	7.6	7.1	56.2	74.9	54.2	73.8	48.7	67.8	46.7	66.6	43.7	66.6	40.7	64.3	25.0	34.1	543	485
20	8.5	8.0	54.8	71.4	52.8	69.3	46.3	63.4	44.3	61.3	41.8	65.4	38.8	62.2	25.0	37.6	542	485
31.25	10.7	10.0	51.9	70.8	49.9	68.6	41.2	60.8	39.2	58.6	37.9	62.7	34.9	58.7	23.6	35.0	540	484
62.5	15.4	14.4	47.4	62.7	45.4	62.3	32.0	48.3	30.0	47.9	31.9	55.4	28.9	52.5	21.5	27.6	539	482
100	19.8	18.5	44.3	58.7	42.3	58.4	24.5	40.2	22.5	39.8	27.8	50.6	24.8	47.9	20.1	27.4	538	482
160	25.6	24.0	41.2	62.1	39.2	59.2	15.6	38.1	13.6	35.2	23.7	46.7	20.7	43.5	18.7	25.7	537	481
200	29.0	27.0	39.8	54.6	37.8	54.2	10.8	27.6	8.8	27.2	21.8	44.4	18.8	41.4	18.0	22.2	537	481
250	32.8	30.5	38.3	53.0	36.3	52.1	5.5	22.5	3.5	21.6	19.8	41.7	16.8	39.7	17.3	25.3	536	481
300*	-	33.8	-	53.5	-	52.3	-	19.7	-	18.5	-	39.9	-	37.5	-	20.1	-	481
400*	-	39.9	-	49.9	-	49.0	-	10.1	-	9.2	-	34.1	-	33.0	-	18.2	-	481
500*	-	45.2	-	55.3	-	52.7	-	10.0	-	7.4	-	34.4	-	31.2	-	17.7	-	480
550*	-	48.2	-	46.2	-	44.5	-	-2.0	-	-3.8	-	33.1	-	30.2	-	19.6	-	480

\*Performance for frequencies above 250MHz are for information only.  
Transmission performance based on 100 meters (328 ft)

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.  
Solution 6™ is a trademark of Siemon

For related product information visit the Siemon e-catalog at:  
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