

DataTwist 6

DataTwist® 6 is a state of the art UTP cable engineered specifically to perform to Category 6 requirements per ANSI/TIA/EIA-568-B.2-1. DataTwist 6 is an unbonded-pair cable built to ensure performance.

Available in plenum and non-plenum versions with guaranteed performance to 250 MHz, DataTwist 6 Cable is suitable for high bandwidth networks.

Features & Benefits

- > Guaranteed to meet or exceed TIA/EIA-568-B.2-1 Category 6
- > Utilizes strict quality manufacturing processes to guarantee performance
- > Plenum cable features Flamarrest® jacket and 100% Dupont Teflon® insulated conductors
- > Sequential footage marking and a rip cord for easier installation.

Applications

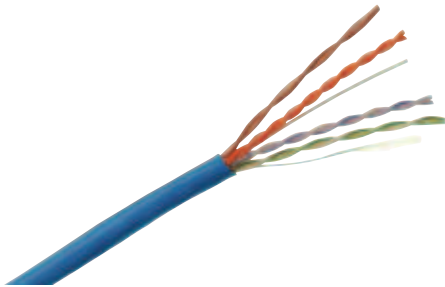
- > DataTwist 6 Cables are intended to be used for horizontal cable installations of high speed Local Area Networks (LANs). Specific applications include:
 - > All UTP Ethernet protocols (e.g. 1000Base-T, 100Base-TX, 100Base-T4, 100Base-T2 and 10 Base-T)
 - > All UTP ATM protocols
 - > 100 Mb/s TP-PMD.

Technical Specifications

- > Construction: Conductors: 23 AWG solid bare copper
- > Insulation:
 - Plenum: 100% Dupont Teflon FEP
 - Non-Plenum: Polyolefin
 - Color coding as per ANSI/TIA/EIA-568-B.2-1.
- > Cable Core: Four twisted pairs, Rip Cord, rod filler
- > Jacket:
 - Plenum: Flamarrest
 - Non-Plenum: PVC.

Transmission Characteristics

- > Values up to 250 MHz are minimum guaranteed values
- > DC Resistance @ 20°C, max.: 8.2 ohms/100 m
- > DC Resistance Unbalance @ 20°C, max.: 5%
- > Mutual Capacitance, Nominal: 15 pF/m
- > Capacitance Unbalance Pair to Ground, max.: 330 pF/100 m
- > Input Impedance: 100 ± 15 ohms from 1 to 100 MHz, 100 ± 22 ohms from 155 to 250 MHz
- > Nominal Velocity of Propagation (NVP):
 - Plenum: 72%
 - Non-Plenum: 70%.
- > Propagation Delay (Skew), max.: 537 ns/100 m.



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FREQUENCY (MHz)	MAX. ATTENUATION (dB/100 m)	NEXT (dB) (min.)	PSNEXT (dB) (min.)	ACR (dB) (min.)	PSACR (dB) (min.)	ELFEXT (dB) (min.)	PSELFEXT (dB) (min.)	RETURN LOSS (dB) (min.)
1.0	2.0	74.3	72.3	72.3	70.3	67.8	64.8	20.0
4.0	3.8	65.3	63.3	61.5	59.5	55.8	52.8	23.0
8.0	5.3	60.8	58.8	55.4	53.4	49.7	46.7	24.5
10.0	6.0	59.3	57.3	53.3	51.3	47.8	44.8	25.0
16.0	7.6	56.2	54.3	48.7	46.7	43.7	40.7	25.0
20.0	8.5	54.8	52.8	46.3	44.3	41.8	38.8	25.0
25.0	9.5	53.3	51.3	43.8	41.8	39.8	36.8	24.3
31.25	10.7	51.9	49.9	41.2	39.2	37.9	34.9	23.6
62.5	15.4	47.4	45.4	32.0	30.0	31.9	28.9	21.5
100.0	19.8	44.3	42.3	24.5	22.5	27.8	24.8	20.1
155.0	25.2	41.5	39.5	16.3	14.3	23.9	20.9	18.8
200.0	29.0	39.8	37.8	10.8	8.8	21.8	18.8	18.0
250.0	32.8	38.3	36.3	5.5	3.5	19.8	16.8	17.3

Mechanical Characteristics

- Minimum Recommended Installation Temperature: 5°C (40°F)
- Temperature Rating: 60°C (140°F)
- Nominal O.D.:
 - CMR: 5.97 mm (0.235 in)
 - CMP: 5.69 mm (0.224 in).
- Min. Bend Radius: 12.7 mm (0.5 in)
- Weight (Cable only): 12.7 kg/100 m (28 lb/kft).

Qualifications

- Meets or exceeds Category 6 requirements per ANSI/TIA/EIA-568-B
- Riser: Listed as NEC Type CMR per UL Standard 444, Meets UL 1666 and CSA FT4 Flame Tests
- Plenum: Listed as NEC Type CMP per UL Standard 444, Meets UL 910 and CSA FT6 Flame Tests.

For More Information

For any other product information call: 1-800-BELDEN-1 or visit us at www.Belden.com

All information is subject to change without notice, since Belden reserves the right to change its products as progress in engineering and manufacturing methods or other circumstances may warrant.

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Ordering Information

DataTwist 6, 4-pair, 23 AWG, CMR

COLOR	LENGTH	PACKAGING	NO. OF PACK PER PALLET	TOTAL PER PALLET	ORDERING NUMBER
White	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0091000
Light Blue	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0061000
White	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 009A1000
Light Blue	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 006A1000
Red	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0021000
Red	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 002A1000
Orange	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0031000
Orange	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 003A1000
Yellow	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0041000
Yellow	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 004A1000
Dark Green	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0051000
Dark Green	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 005A1000
Violet	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0071000
Violet	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 007A1000
Gray	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0081000
Gray	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 008A1000
Black	305 m (1000 ft.)	Reel	40 reels/pallet	12192 m (40000 ft.)	7881A 0101000
Black	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7881A 010A1000

DataTwist 6, 4-pair, 23 AWG, CMP

COLOR	LENGTH	PACKAGING	NO. OF PACK PER PALLET	TOTAL PER PALLET	ORDERING NUMBER
White	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0091000
Blue	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A D151000
White	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 009A1000
Blue	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A D15A1000
Red	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0021000
Red	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 002A1000
Orange	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0031000
Orange	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 003A1000
Yellow	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0041000
Yellow	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 004A1000
Dark Green	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0051000
Dark Green	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 005A1000
Violet	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0071000
Violet	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 007A1000
Gray	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0081000
Gray	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 008A1000
Black	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 0101000
Black	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 010A1000
Natural	305 m (1000 ft.)	Reel	36 reels/pallet	10973 m (36000 ft.)	7882A 8771000
Natural	305 m (1000 ft.)	Reel-in-a-Box	22 boxes/pallet	6706 m (22000 ft.)	7882A 877A1000

The DataTwist 6 UTP Unbonded-Pair Cables are available on a plastic reel-in-a-box or a plastic spool.