

## Technical Specifications (continued)

### Key Electrical Attributes

Frequency (MHz)	Insertion Loss (dB/100 m)		PSNEXT (dB)		PSACR (dB)		PSACRF (dB)		Return Loss (dB)		TCL (dB)		ELTCTL (dB)	
	TIA*	Spec.	TIA*	Spec.	TIA*	Spec.	TIA*	Spec.	TIA*	Spec.	TIA*	Spec.	TIA*	Spec.
1	2.0	2.0	72.3	75.3	70.3	73.3	64.8	67.8	20.0	20.0	40.0	40.0	35.0	35.0
4	3.8	3.7	63.3	66.3	59.5	62.6	52.8	55.8	23.0	23.0	40.0	40.0	23.0	23.0
8	5.3	5.2	58.8	63.3	53.5	58.1	46.7	49.7	24.5	24.5	40.0	40.0	17.0	17.0
10	6.0	5.8	57.3	61.8	51.3	56.0	44.8	47.8	25.0	25.0	40.0	40.0	15.0	15.0
16	7.6	7.4	54.2	58.6	46.6	51.2	40.7	43.7	25.0	25.0	38.0	38.0	10.9	10.9
20	8.5	8.3	52.8	57.1	44.3	48.8	38.8	41.8	25.0	25.0	37.0	37.0	9.0	9.0
25	9.5	9.3	51.3	55.5	41.8	46.3	36.8	39.8	24.3	24.3	36.0	36.0	7.1	7.1
31.25	10.7	10.4	49.9	54.0	39.2	43.6	34.9	37.9	23.6	23.6	35.1	35.1	5.1	5.1
62.5	15.4	15.0	45.4	49.1	30.0	34.1	28.9	31.9	21.5	21.5	32.0	32.0	-	-
100	19.8	19.3	42.3	45.8	22.5	26.5	24.8	27.8	20.1	20.8	30.0	30.0	-	-
200	29.0	28.3	37.8	40.9	8.8	12.6	18.8	21.8	18.0	18.7	27.0	27.0	-	-
250	32.8	32.1	36.3	39.3	3.5	7.2	16.8	19.8	17.3	18.0	26.0	26.0	-	-
300	-	35.6	-	36.1	-	0.5	-	18.3	-	17.5	-	-	-	-
350	-	38.9	-	35.1	-	-	-	16.9	-	17.0	-	-	-	-
400	-	42.0	-	34.3	-	-	-	15.8	-	16.6	-	-	-	-
450	-	45.0	-	33.5	-	-	-	14.7	-	16.2	-	-	-	-
500	-	47.9	-	32.8	-	-	-	13.8	-	15.9	-	-	-	-
550	-	50.6	-	32.2	-	-	-	13.0	-	15.6	-	-	-	-

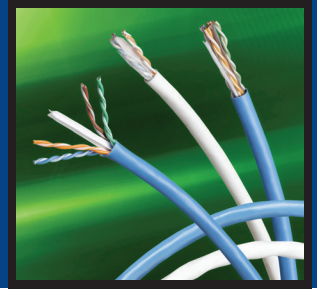
Values above 350 MHz for engineering purposes only. The values shown are guaranteed minimum performance.  
\*TIA/EIA-568-C.2 Category 6 Standard

### Qualifications

- Meets or exceeds Category 6 requirements per TIA/EIA-568-C.2, ISO/IEC 11801 ed 2 Amendment 2 (2010) Class E
- Exceeds the Category 5e requirements per ANSI/TIA/EIA-568-A.5 or TIA/EIA-568-C.2
- Exceeds the Category 5 requirements per ANSI/TIA/EIA-568-A, CSA T529-95 and ISO/IEC 11801-1995
- Exceeds the Category 5 requirements per NEMA Standard WC 63.1-1996
- Exceeds the Category 5 requirements of ICEA S-90-661-1997
- Riser: ITS/ETL Certified as CMR, and listed as NEC Type CMR per UL Standard 444
- Plenum: ITS/ETL Certified as CMP, and listed as NEC Type CMP per UL Standard 444
- LSZH: EN50288-6-1, ISO/IEC 332-1, 754-2 and 1034-2

### Key Physical Attributes

4-pair, 23 AWG	Nominal O.D.	Min. Bend Radius	Weight (Cable Only)
DataTwist 2412 Cable CMR	5.44 mm (0.214 in.)	22.15 mm (0.872 in.)	3.9 kg/100 m (26.0 lb/kft)
DataTwist 2413 Cable CMP	5.33 mm (0.210 in.)	21.04 mm (0.828 in.)	4.2 kg/100 m (28.0 lb/kft)
DataTwist 2424 Cable LSZH	5.44 mm (0.214 in.)	23.28 mm (0.916 in.)	4.2 kg/100 m (28.0 lb/kft)



## Technical Specifications (continued)

### Key Electrical Attributes – DataTwist 3600 Bonded-Pair Cable

Frequency (MHz)	Max. Insertion Loss (dB/100 m)		Min. PSNEXT (dB)		Min. PSACR (dB)		Min. PSACRF (dB)		THE BONDED-PAIR ADVANTAGE					
									Min. Return Loss (dB)*		Min. Balance TCL (dB)*		Min. Balance ELTCTL (dB)*	
	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden
1	2.0	2.0	72.3	79.3	70.3	77.3	64.8	70.8	20.0	20.0	40.0	42.0	35.0	37.0
4	3.8	3.7	63.3	70.3	59.5	66.6	52.8	58.8	23.0	23.0	40.0	42.0	23.0	25.0
8	5.3	5.2	58.8	65.8	53.4	60.6	46.7	52.7	24.5	24.5	40.0	42.0	16.9	18.9
10	6.0	5.8	57.3	64.3	51.3	58.5	44.8	50.8	25.0	25.0	40.0	42.0	15.0	17.0
16	7.6	7.4	54.2	61.2	46.7	53.9	40.7	46.7	25.0	25.0	38.0	40.0	10.9	12.9
20	8.5	8.3	52.8	59.8	44.3	51.5	38.8	44.8	25.0	25.0	37.0	39.0	9.0	11.0
25	9.5	9.3	51.3	58.3	41.8	49.1	36.8	42.8	24.3	25.0	36.0	38.0	7.0	9.0
31.25	10.7	10.4	49.9	56.9	39.2	46.5	34.9	40.9	23.6	25.0	35.1	37.1	-	-
62.5	15.4	15.0	45.4	52.4	30.0	37.4	28.9	34.9	21.5	25.0	32.0	34.0	-	-
100	19.8	19.3	42.3	49.3	22.5	30.0	24.8	30.8	20.1	25.0	30.0	32.0	-	-
200	29.0	28.3	37.8	44.8	8.8	16.5	18.8	24.8	18.0	21.6	27.0	29.0	-	-
250	32.8	32.1	36.3	43.3	3.5	11.2	16.8	22.8	17.3	20.5	26.0	28.0	-	-
300	-	35.6	-	42.1	-	6.5	-	21.3	-	20.1	-	-	-	-
350	-	38.9	-	41.1	-	2.3	-	19.9	-	19.8	-	-	-	-
400	-	42.0	-	38.3	-	-	-	18.8	-	19.5	-	-	-	-
450	-	45.0	-	37.5	-	-	-	17.7	-	18.9	-	-	-	-
500	-	47.9	-	36.8	-	-	-	16.8	-	18.4	-	-	-	-
550	-	50.6	-	36.2	-	-	-	16.0	-	18.0	-	-	-	-
600	-	53.3	-	35.6	-	-	-	15.2	-	17.6	-	-	-	-
650	-	55.9	-	35.1	-	-	-	14.5	-	17.2	-	-	-	-

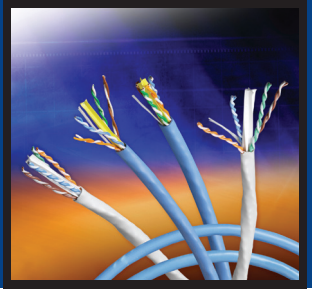
Values above 400 MHz for engineering purposes only. The values shown are guaranteed minimum performance.

\* Belden's Bonded-Pair Cables provide improved return loss and balance performance.

### Key Electrical Attributes – DataTwist 3600 Nonbonded-Pair Cable

Frequency (MHz)	Max. Insertion Loss (dB/100 m)		Min. PSNEXT (dB)		Min. PSACR (dB)		Min. PSACRF (dB)		Min. Return Loss (dB)		Min. Balance TCL (dB)		Min. Balance ELTCTL (dB)	
	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden
1	2.0	2.0	72.3	79.3	70.3	77.3	64.8	70.8	20.0	20.0	40.0	40.0	35.0	35.0
4	3.8	3.7	63.3	70.3	59.5	66.6	52.8	58.8	23.0	23.0	40.0	40.0	23.0	23.0
8	5.3	5.2	58.8	65.8	53.4	60.6	46.7	52.7	24.5	24.5	40.0	40.0	16.9	16.9
10	6.0	5.8	57.3	64.3	51.3	58.5	44.8	50.8	25.0	25.0	40.0	40.0	15.0	15.0
16	7.6	7.4	54.2	61.2	46.7	53.9	40.7	46.7	25.0	25.0	38.0	38.0	10.9	10.9
20	8.5	8.3	52.8	59.8	44.3	51.5	38.8	44.8	25.0	25.0	37.0	37.0	9.0	9.0
25	9.5	9.3	51.3	58.3	41.8	49.1	36.8	42.8	24.3	24.3	36.0	36.0	7.0	7.0
31.25	10.7	10.4	49.9	56.9	39.2	46.5	34.9	40.9	23.6	23.6	35.1	35.1	-	-
62.5	15.4	15.0	45.4	52.4	30.0	37.4	28.9	34.9	21.5	21.5	32.0	32.0	-	-
100	19.8	19.3	42.3	49.3	22.5	30.0	24.8	30.8	20.1	20.8	30.0	30.0	-	-
200	29.0	28.3	37.8	44.8	8.8	16.5	18.8	24.8	18.0	18.7	27.0	27.0	-	-
250	32.8	32.1	36.3	43.3	3.5	11.2	16.8	22.8	17.3	18.0	26.0	26.0	-	-
300	-	35.6	-	42.1	-	6.5	-	21.3	-	17.5	-	-	-	-
350	-	38.9	-	41.1	-	2.3	-	19.9	-	17.0	-	-	-	-
400	-	42.0	-	38.3	-	-	-	18.8	-	16.6	-	-	-	-
450	-	45.0	-	37.5	-	-	-	17.7	-	16.2	-	-	-	-
500	-	47.9	-	36.8	-	-	-	16.8	-	15.9	-	-	-	-
550	-	50.6	-	36.2	-	-	-	16.0	-	15.6	-	-	-	-
600	-	53.3	-	35.6	-	-	-	15.2	-	15.4	-	-	-	-
650	-	55.9	-	35.1	-	-	-	14.5	-	15.1	-	-	-	-

Values above 400 MHz for engineering purposes only. The values shown are guaranteed minimum performance.



Technical Specifications (continued)

**Key Electrical Attributes – DataTwist 4800 Bonded-Pair Cable**

Frequency (MHz)	Max. Insertion Loss (dB/100 m)		Min. PSNEXT (dB)		Min. PSACR (dB)		Min. PSACRF (dB)		THE BONDED-PAIR ADVANTAGE					
									Min. Return Loss (dB)*		Min. Balance TCL (dB)*		Min. Balance ELTCTL (dB)*	
	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden
1	2.0	1.9	72.3	80.3	70.3	78.3	64.8	72.8	20.0	20.0	40.0	45.0	35.0	40.0
4	3.8	3.5	63.3	71.3	59.5	67.7	52.8	60.8	23.0	23.0	40.0	45.0	23.0	28.0
8	5.3	4.9	58.8	66.8	53.5	61.8	46.7	54.7	24.5	24.5	40.0	45.0	16.9	21.9
10	6.0	5.5	57.3	65.3	51.3	59.8	44.8	52.8	25.0	25.0	40.0	45.0	15.0	20.0
16	7.6	7.0	54.2	62.3	46.6	55.3	40.7	48.7	25.0	25.0	38.0	43.0	10.9	15.9
20	8.5	7.8	52.8	60.8	44.3	53.0	38.8	46.8	25.0	25.0	37.0	42.0	9.0	14.0
25	9.5	8.7	51.3	59.3	41.8	50.6	36.8	44.8	24.3	25.0	36.0	41.0	7.0	12.0
31.25	10.7	9.8	49.9	57.9	39.2	48.1	34.9	42.9	23.6	25.0	35.1	40.1	-	-
62.5	15.4	14.1	45.4	53.4	30.0	39.3	28.9	36.9	21.5	25.0	32.0	37.0	-	-
100	19.8	18.0	42.3	50.3	22.5	32.3	24.8	32.8	20.1	25.0	30.0	35.0	-	-
200	29.0	26.2	37.8	45.8	8.8	19.6	18.8	26.8	18.0	21.6	27.0	32.0	-	-
250	32.8	29.7	36.3	44.3	3.5	14.7	16.8	24.8	17.3	20.5	26.0	31.0	-	-
300	-	32.8	-	43.2	-	10.3	-	23.3	-	20.1	-	-	-	-
350	-	35.8	-	42.2	-	6.4	-	21.9	-	19.8	-	-	-	-
400	-	38.6	-	41.3	-	2.7	-	20.8	-	19.5	-	-	-	-
450	-	41.2	-	40.5	-	0	-	19.7	-	18.9	-	-	-	-
500	-	43.8	-	39.8	-	-	-	18.8	-	18.4	-	-	-	-
550	-	46.2	-	39.2	-	-	-	18.0	-	18.0	-	-	-	-
600	-	48.6	-	38.6	-	-	-	17.2	-	17.6	-	-	-	-
650	-	50.9	-	36.1	-	-	-	14.5	-	17.2	-	-	-	-
750	-	55.3	-	35.2	-	-	-	13.3	-	16.5	-	-	-	-
860	-	60.0	-	34.3	-	-	-	12.1	-	15.8	-	-	-	-

Values above 600 MHz for engineering purposes only. The values shown are guaranteed minimum performance.

\*Belden's Bonded-Pair Cables provide improved return loss and balance performance.

**Key Electrical Attributes – DataTwist 4800 Nonbonded-Pair Cable**

Frequency (MHz)	Max. Insertion Loss (dB/100 m)		Min. PSNEXT (dB)		Min. PSACR (dB)		Min. PSACRF (dB)		Min. Return Loss (dB)		Min. Balance TCL (dB)		Min. Balance ELTCTL (dB)	
	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden
1	2.0	1.8	72.3	80.3	70.3	78.4	64.8	72.8	20.0	20.0	40.0	40.0	35.0	35.0
4	3.8	3.5	63.3	71.3	59.5	67.8	52.8	60.8	23.0	23.0	40.0	40.0	23.0	23.0
8	5.3	4.9	58.8	66.8	53.4	61.8	46.7	54.7	24.5	24.5	40.0	40.0	16.9	16.9
10	6.0	5.5	57.3	65.3	51.3	59.8	44.8	52.8	25.0	25.0	40.0	40.0	15.0	15.0
16	7.6	7.0	54.2	62.2	46.7	55.3	40.7	48.7	25.0	25.0	38.0	38.0	10.9	10.9
20	8.5	7.8	52.8	60.8	44.3	53.0	38.8	46.8	25.0	25.0	37.0	37.0	9.0	9.0
25	9.5	8.7	51.3	59.3	41.8	50.6	36.8	44.8	24.3	22.5	36.0	36.0	7.0	7.0
31.25	10.7	9.8	49.9	57.9	39.2	48.1	34.9	42.9	23.6	24.3	35.1	35.1	-	-
62.5	15.4	14.1	45.4	53.4	30.0	39.3	28.9	36.9	21.5	22.2	32.0	32.0	-	-
100	19.8	18.0	42.3	50.3	22.5	32.3	24.8	32.8	20.1	20.8	30.0	30.0	-	-
200	29.0	26.2	37.8	45.8	8.8	19.6	18.8	26.8	18.0	18.7	27.0	27.0	-	-
250	32.8	29.6	36.3	44.3	3.5	14.8	16.8	24.8	17.3	18.0	26.0	26.0	-	-
300	-	32.7	-	43.2	-	10.4	-	23.3	-	17.5	-	-	-	-
350	-	35.6	-	42.2	-	6.5	-	21.9	-	17.0	-	-	-	-
400	-	38.4	-	41.3	-	2.9	-	20.8	-	16.6	-	-	-	-
450	-	41.0	-	40.5	-	0	-	19.7	-	16.2	-	-	-	-
500	-	43.6	-	39.8	-	-	-	18.8	-	15.9	-	-	-	-
550	-	46.0	-	39.2	-	-	-	18.0	-	15.6	-	-	-	-
600	-	48.4	-	38.6	-	-	-	17.2	-	15.4	-	-	-	-
650	-	50.6	-	36.1	-	-	-	15.5	-	15.1	-	-	-	-
750	-	55.0	-	35.2	-	-	-	14.3	-	14.6	-	-	-	-
860	-	59.6	-	34.3	-	-	-	13.1	-	14.3	-	-	-	-

Values above 600 MHz for engineering purposes only. The values shown are guaranteed minimum performance.