

Detailed Specifications & Technical Data



1533R Paired - DataTwist® Category 5e

	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p> <p>Color Code Chart : No. 8 for DataTwist Cables (Modified Western Electric).pdf</p>
---	---

Description:

4 pair ScTP, riser rated, 24 AWG solid bare copper conductors, polyolefin insulation, foil shield bonded to PVC jacket. Sequential marking at two foot intervals.

SUITABLE APPLICATIONS:

Suitable Applications	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments, 100MHz Category 5e
-----------------------	--

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Pairs	4
Total Number of Conductors	8
AWG	24
Stranding	Solid
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	PO - Polyolefin
---------------------	-----------------

Pair Color Code Chart :

Number	Color	Number	Color
1	White/Blue Stripe & Blue	3	White/Green Stripe & Green
2	White/Orange Stripe & Orange	4	White/Brown Stripe & Brown

OUTER SHIELD:

Outer Shield Material Trade Name	Beldfoil®
Outer Shield Type	Tape
Outer Shield Material	Aluminum Foil-Polyester Tape
Outer Shield % Coverage	100 %

OUTER SHIELD DRAIN WIRE :

Outer Shield Drain Wire AWG	24
-----------------------------	----

**Detailed Specifications &
Technical Data**



1533R Paired - DataTwist® Category 5e

Outer Shield Drain Wire Stranding	7x32
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper

OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
Outer Jacket Ripcord	No

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.260 in.
--------------------------	----------

MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-20°C To +75°C
Bulk Cable Weight	30 lbs/1000 ft.
Max. Recommended Pulling Tension	25 lbs.
Min. Bend Radius (Install)	1 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMR, UL444
CEC/C(UL) Specification	CMR
IEC Specification	11801 Category 5
TIA/EIA Specification	568-B.2 Category 5e
Other Specification	NEMA WC-63.1 Category 5e, UL Verified to Category 5e

FLAME TEST:

UL Flame Test	UL1666 Riser
CSA Flame Test	FT4

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
Plenum Number	1533P

ELECTRICAL CHARACTERISTICS:

Nom. Mutual Capacitance @ 1 KHz	15 pF/ft
Maximum Capacitance Unbalance (pF/100 m)	330 pF/100 m
Nominal Velocity of Propagation	70 %
Maximum Delay (ns/100 m)	538 @ 100MHz ns/100 m
Maximum Delay Skew (ns/100m)	45 ns/100 m
Maximum Conductor DC Resistance @ 20 Deg. C	9.38 Ohms/100 m
Maximum DCR Unbalance @ 20 Deg. C	3 %
Max. Operating Voltage - UL	300 V RMS

ELECTRICAL CHARACTERISTICS - PREMISE:

**Detailed Specifications &
Technical Data**



1533R Paired - DataTwist® Category 5e

Premise Cable Electricals Table 1 :

Frequency (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min. Return Loss (dB)	Min. Structural Return Loss (dB)
1	2.0	65.3	62.3	60.3	60.3	20.0	23.0
4	4.1	56.3	53.3	49.2	49.2	23.0	23.0
8	5.8	51.8	48.8	43.0	43.0	24.5	24.5
10	6.5	50.3	47.3	40.8	40.8	25.0	25.0
16	8.2	47.3	44.3	36.0	36.0	25.0	25.0
20	9.3	45.8	42.8	33.5	33.5	25.0	25.0
25	10.4	44.3	41.3	30.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	28.2	28.2	23.6	23.6
62.5	17.0	38.4	35.4	18.4	18.4	21.5	21.5
100	22.0	35.3	32.3	10.3	10.3	20.1	20.1

Premise Cable Electricals Table 2 :

Frequency (MHz)	Input (Unfitted) Impedance (Ohms)	Fitted Impedance (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8

NOTES:

Notes	Shield is bonded to jacket inner wall for electrical stability. RJ-45 Compatible. Jacket sequentially marked at 2 ft. intervals. Third party verified to TIA/EIA-568-B.2, Category 5e.
-------	--

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
1533R 0021000	4 PR #24 PP FS PVC	1000	34	RED	C
1533R 002A1000	4 PR #24 PP FS PVC	A1000	37	RED	C
1533R 0031000	4 PR #24 PP FS PVC	1000	34	ORANGE	C
1533R 003A1000	4 PR #24 PP FS PVC	A1000	35	ORANGE	C
1533R 0041000	4 PR #24 PP FS PVC	1000	34	YELLOW	C
1533R 004A1000	4 PR #24 PP FS PVC	A1000	35	YELLOW	C

**Detailed Specifications &
Technical Data**



1533R Paired - DataTwist® Category 5e

1533R 0051000	4 PR #24 PP FS PVC	1000	34	GREEN, DARK	C
1533R 005A1000	4 PR #24 PP FS PVC	A1000	35	GREEN, DARK	C
1533R 0061000	4 PR #24 PP FS PVC	1000	34	BLUE, LIGHT	C
1533R 006A1000	4 PR #24 PP FS PVC	A1000	35	BLUE, LIGHT	
1533R 0101000	4 PR #24 PP FS PVC	1000	34	BLACK	C
1533R 010A1000	4 PR #24 PP FS PVC	A1000	35	BLACK	
1533R F2V1000	4 PR #24 PP FS PVC	1000	34	GRAY, DEC	C
1533R F2V1640	4 PR #24 PP FS PVC	1640	57.4	GRAY, DEC	C
1533R F2VA1000	4 PR #24 PP FS PVC	A1000	35	GRAY, DEC	

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-09-2004

© 2003 Belden Wire & Cable Company
All Rights Reserved.

Although Belden Electronics Division ("Belden") makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.
Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.
All sales of Belden products are subject to Belden's standard terms and conditions of sale.