

1.0 DESCRIPTION

4 PAIR 24 AWG SCREENED TWISTED PAIR (FTP) CABLE, FOR HIGH SPEED DATA TRANSMISSION AND IS TESTED TO 100 MHZ. THIS CABLE IS PLENUM RATED AND VERIFIED TO CATEGORY 5e ELECTRICALS.


2.0 CONSTRUCTION:

- 2.1 CONDUCTOR: 24 AWG SOLID BARE COPPER; OD: .021" NOM.
- 2.2 INSULATION: PLENUM RATED THERMOPLASTIC, OD: .0405" NOM.
- 2.3 COLOR CODE: P1. WHITE/BLUE, BLUE P3. WHITE/GREEN, GREEN
P2. WHITE/ORANGE, ORANGE P4. WHITE/BROW, BROWN
- 2.4 PAIRS: 4/PAIRS TWISTED WITH LEFT HAND LAYS
(EACH PAIR TWISTED WITH A DIFFERENT LAY LENGTH)
- 2.5 CABLE: 4 PAIRS CABLED TOGETHER WITH A RIGHT HAND LAY
- 2.6 BINDER: POLYESTER TAPE; 25% OVERLAP
- 2.7 DRAIN WIRE: 24 AWG 7/32 TINNED COPPER
- 2.8 SHIELD: ALUMINUM/POLYESTER TAPE; 25% OVERLAP (ALUM SIDE IN)
- 2.9 JACKET: PLENUM RATED PVC
OD: .225" NOM.

2.10 MARKING: DRAKA COMTEQ SUPERCAT100E 853308 4PR24AWG SCREENED TYPE
CMP/MPP (UL) C(UL) E116394 -- ETL VERIFIED TO TIA/EIA-568-B.2 SCTP
CAT. 5E AAAAA* MO/YR** XXXXXX FEET***

2.11 APPROX. WEIGHT: 32.0 LBS/1000 FT.

* Order Number ** Date *** Sequential Footage every 2ft.

REV	DATE	CHANGE DETAIL	 Draka USA		Helix/HiTemp Cables, Inc. 20 Forge Park, Franklin, Ma 02038 Phone: 508-541-7100 Fax: 508-541-8122	
					Title:	853308
E	8/12/02	Changed Skew to 25 ns TJG	Description:	4/PR 24 AWG FTP(ScTP) CAT 5e SuperCAT 100e Plenum Rated Cable		
D	5/15/02	Changed to New MSW format	Drawn By:	T.Grzysiewicz		
C	7/17/00	Changed copper and insulation OD & cable OD	Mktg Approval:	<i>CD 8/18/02</i>		
B	1/28/00	Update Electrical Table	Final Approval:	<i>P. Scumell 8/12/02</i>		
A	12/03/99	Spec Released	PAGE 1 of 2			

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3.0 ELECTRICAL CHARACTERISTICS

FREQ (MHz)	ATTENUATION (dB/100m)		NEXT (dB)		Power Sum NEXT (dB)		ACR (dB/100m)		PSACR (dB/100m)		ELFEXT (dB/100m)		PSELFEXT (dB/100m)		RL (dB)
	Typical	max.	Typical	min.	Typical	min.	Typical	min.	Typical	min.	Typical	min.	Typical	min.	min.
0.772	1.5	1.8	81.1	67.0	74.8	64.0	79.6	65.2	73.3	62.2	80.4	66.0	72.6	63.0	-
1	1.7	2.0	81.5	65.3	75.9	62.3	79.7	63.3	74.2	60.3	77.2	63.8	70.9	60.8	20.0
4	3.5	4.1	65.9	56.3	58.2	53.3	62.4	52.2	54.7	49.2	65.6	51.7	62.0	48.7	23.0
8	5.0	5.8	63.3	51.8	58.0	48.8	58.3	46.0	53.0	43.0	59.1	45.7	56.8	42.7	24.5
10	5.6	6.5	61.7	50.3	55.3	47.3	56.1	43.8	49.6	40.8	57.7	43.8	55.1	40.8	25.0
16	7.2	8.2	59.8	47.3	51.6	44.3	52.6	39.1	44.4	36.1	54.0	39.7	51.6	36.7	25.0
20	8.1	9.3	59.9	45.8	55.2	42.8	51.8	36.5	47.0	33.5	53.2	37.7	51.1	34.7	25.0
25	9.1	10.4	55.1	44.3	47.4	41.3	46.0	33.9	38.3	30.9	51.6	35.8	49.8	32.8	24.3
31.25	10.2	11.7	53.6	42.9	45.8	39.9	43.4	31.2	35.5	28.2	47.6	33.9	48.0	30.9	23.6
62.5	14.8	17.0	51.8	38.4	46.5	35.4	37.0	21.4	31.7	18.4	45.6	27.8	42.6	24.8	21.5
100	19.3	22.0	48.5	35.3	39.4	32.3	29.2	13.3	20.1	10.3	31.4	23.8	31.8	20.8	20.1

DC Resistance: 9.38 Ohms/100m (28.6 Ohms/Mft) MAX..
DCR Unbalanced: 5% MAX.
Mutual Capacitance: 55.8 pF/m (17 pF/ft) MAX..
Capacitance Unbalance: 330 pF/100m (1 pF/ft) MAX..
Characteristic Impedance: 100 Ohms +/- 15% (1-100 MHz)
Input Impedance: 100 Ohms +/- 15% (1-100 MHz)
Prop. Delay (Skew): 25 ns/100m MAX.
Velocity of Propagation: 72% NOM
Temp. & Voltage Rating: -10°C TO +75°C / 300V MAX.

4.0 APPROVALS

- 4.1 UL LISTING: COMMUNICATION CABLE PER TYPE CMP, UL 444, FILE # E-116394
- 4.2 VERIFICATION: ETL TIA/EIA-568-B.2 CATEGORY 5e
- 4.3 FLAMMABILITY: APPROVED FOR PLENUM USE WITHOUT CONDUIT PER NEC 800 BY PASSING UL 910 STEINER TUNNEL TEST AND CSA CMP FLAME TEST.

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