

Category 3

4 Pair #24 AWG UTP Category 3 Cable

DESCRIPTION

UNSHIELDED TWISTED PAIR (UTP) CATEGORY 3 CABLE FOR USE IN HORIZONTAL CABLING SYSTEMS PER TIA 568-B. THE CABLE CONSISTS OF #24 AWG SOLID BARE COPPER INSULATED CONDUCTORS, ASSEMBLED INTO FOUR TWISTED PAIRS, WITH A RIPCORD, UNDER AN OVERALL JACKET. PRINT INCLUDES DESCENDING FOOTAGE MARKERS FROM 1000 TO 0 ON EACH 1000 FT REEL OR BOX.

THE PLENUM RATED CABLE IS FOR USE IN AIR HANDLING DUCTS AND SPACES IN ACCORDANCE WITH ARTICLE 800 OF THE NATIONAL ELECTRICAL CODE (NEC). THE CABLE IS UL (USA) & cUL (CANADA) LISTED FOR THIS APPLICATION BY PASSING NFPA 262 (FT6 OR PREVIOUSLY UL 910 STEINER TUNNEL) TEST.

THE RISER NON-PLENUM RATED CABLE IS FOR USE AS A VERTICAL RUN IN A SHAFT AND FOR GENERAL PURPOSE COMMUNICATIONS USE IN ACCORDANCE WITH ARTICLE 800 OF THE NEC. THE CABLE IS UL (USA) & cUL (CANADA) LISTED FOR THIS APPLICATION BY PASSING UL 1666 RISER CABLE FLAMMABILITY TEST.

THIS CABLE COMPLIES WITH THE EU-RoHS DIRECTIVE 2002/95/EC (RESTRICTIONS ON HAZARDOUS SUBSTANCES) REGULATIONS.

SUPPORTED APPLICATIONS

ANALOG & DIGITAL VOICE, ISDN, IBM 3270 & 3x, IEEE 802.5 4 Mbps TOKEN RING, IEEE 802.3 1BASE-5 & 10BASE-T, 10 Mbps ETHERNET, 100BASE VG-ANYLAN.

CONSTRUCTION

PRIMARIES: CONDUCTOR: 24 AWG (.5 mm) SOLID BARE COPPER
INSULATION:
PL: NO LEAD PLENUM RATED THERMOPLASTIC
NP: THERMOPLASTIC

PAIR ASSEMBLY: 2 PRIMARIES TWISTED IN VARIED LAYS

COLOR CODE: SEE TABLE 1

CABLE ASSEMBLY: 4 PAIRS CABLED TOGETHER

JACKET: PL: NO LEAD PLENUM RATED THERMOPLASTIC
NP: NO LEAD THERMOPLASTIC
JACKET COLOR: SEE TABLE 2
NOMINAL CABLE OD: .161" (4.1 mm)

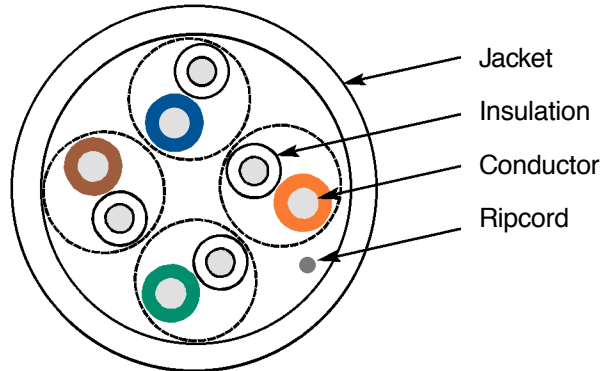


TABLE 1

PAIR NUMBER	PAIR COLOR CODE	
1	WHITE-BLUE	BLUE
2	WHITE-ORANGE	ORANGE
3	WHITE-GREEN	GREEN
4	WHITE-BROWN	BROWN

TABLE 2

PLENUM		NON-PLENUM	
PART NUMBER	JACKET COLOR	PART NUMBER	JACKET COLOR
M55760	GRAY	M52995	GRAY
M56030	BLUE	M55720	BLUE
M56061	WHITE	M56303	WHITE
M56414	YELLOW	M56970	RED
M56782	GREEN	M56969	BLACK
M55691	ORANGE	M56917	GREEN
M57045	BEIGE	M58070	BEIGE
M56930	MAUVE		
M56890	RED		
M56691	BLACK		
M57083	PINK		
M56170	BROWN		
M57618	VIOLET		
M56747	DK. GREEN		
M58110	ROSEY BEIGE		

PHYSICAL CHARACTERISTICS

CABLE WEIGHT: PL: 21 lbs/1000ft (31 kg/km)
NP: 20 lbs/1000ft (30 kg/km)

BENDING RADIUS: 1" (25.4 mm) MIN (4 x CABLE OD)

PULLING TENSION: 25 lbf (110 N) MAX

OPERATING TEMP.: -20°C to +60°C (-4°F to +140°F)

STORAGE TEMP.: -20°C to +75°C (-4°F to +167°F)

INSTALLATION TEMP.*: 0°C to +60°C (+32°F to +140°F)

*THE INSTALLATION TEMPERATURE REFERS TO THE TEMPERATURE OF THE CABLE WHILE BEING INSTALLED OR PULLED. DO NOT INSTALL CABLE BELOW 0°C (+32°F).

PL = PLENUM
NP = NON-PLENUM

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ELECTRICAL CHARACTERISTICS (REF TABLE 3)

CONDUCTOR DCR:	9.38 Ω /100m (28.6 Ω /Mft) MAX	NEAR END CROSSTALK (NEXT):	47 - 15 $\log_{10}(f/0.772)$ dB/100m MIN
DCR UNBALANCE:	5% MAX	POWER SUM NEAR END CROSSTALK (PS-NEXT):	43 - 15 $\log_{10}(f/0.772)$ dB/100m MIN
MUTUAL CAPACITANCE:	66 pF/m (20 pF/ft) NOM	PROPAGATION DELAY:	534 + 36 / f ns/100m MAX
CAPACITANCE UNBALANCE PAIR/GROUND:	330 pF/100m (1000 pF/Mft) MAX	DELTA DELAY (SKEW):	45 ns/100m MAX
CHARACTERISTIC IMPEDANCE:	100 Ω \pm 15% (1-16 MHz)	NOMINAL VELOCITY OF PROPAGATION (NVP):	64%
STRUCTURAL RETURN LOSS (SRL):	12 dB MIN (1-10 MHz) 12 - 10 $\log_{10}(f/10)$ dB MIN (>10 MHz)	WHERE f = FREQUENCY IN MHz from .772 to 16 MHz.	
ATTENUATION:	2.320 f + .238 f dB/100m MAX		

TABLE 3

REFERENCE ELECTRICAL CHARACTERISTICS

FREQ (MHz)	ATTENUATION (dB/100m)			NEXT (dB/100m)		ACR*	PS-NEXT (dB/100m)		PS-ACR*	SRL (dB)
	avg	max	max	avg	min	avg	avg	min	avg	min
.772	1.9	2.2	6.8	52	47	50.1	48	43	46.1	-
1.0	2.2	2.6	7.8	50	45	47.8	46	41	43.8	12
4.0	5.0	5.6	17	41	36	36.0	37	32	32.0	12
8.0	7.7	8.5	26	36	31	28.3	32	27	24.3	12
10.0	8.8	9.7	30	35	30	26.2	31	26	22.2	12
16.0	11.9	13.1	40	32	27	20.1	28	23	16.1	10

*ACR - MINIMUM ATTENUATION TO CROSSTALK RATIO

Mohawk reserves the right to change specification in the interest of product enhancement.