



LAN-Trak OSP Category 6

4 Pair #24 AWG UTP Category 6 Outdoor Cable

PART # M57622

DESCRIPTION

ENHANCED UNSHIELDED TWISTED PAIR (UTP) CATEGORY 6 CABLE FOR USE IN HORIZONTAL CABLING SYSTEMS AS DESCRIBED IN TIA/EIA 568-B. THE CABLE EXCEEDS TIA/EIA 568-B.2-1 AND ISO/IEC 11801 CATEGORY 6 ELECTRICAL CHARACTERISTICS. THE CABLE CONSISTS OF #24 AWG SOLID BARE COPPER INSULATED CONDUCTORS, ASSEMBLED INTO FOUR TIGHTLY TWISTED PAIRS, WITH A FLEXWEB® CORE SEPARATOR, FLOODED TO PREVENT MOISTURE INGRESS, UNDER AN OVERALL JACKET. THIS PRODUCT AND/OR ITS MANUFACTURE IS COVERED BY US PATENT NOS. 6074503, 6596944 & 5424491.

THE CABLE IS SUITABLE FOR OUTDOOR USE IN DUCT AND FOR AERIAL LASHING. IT IS WATER BLOCKED AND HAS A BLACK SUNLIGHT RESISTANT JACKET. THE CABLE IS NOT UL OR CSA LISTED, SINCE IT IS NOT FLAME RETARDANT. CONSULT THE NATIONAL ELECTRICAL CODE (NEC) ARTICLE 800 FOR USE IN BUILDINGS.

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

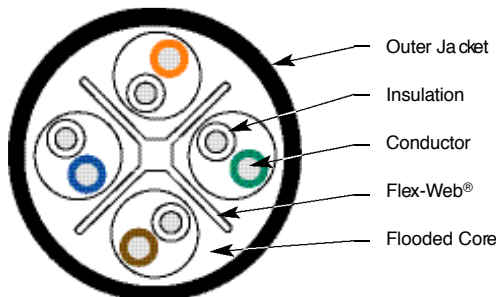


TABLE 1

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

SUPPORTED APPLICATIONS

IEEE 802.3 10BASE-T (ETHERNET), 100BASE-T (FAST ETHERNET), AND 1000BASE-T (GIGABIT ETHERNET), IEEE 802.3af POWER OVER ETHERNET FOR VoIP, ANSI X3.263 FDDI TP-PMD, IEEE 802.5 4 AND 16 Mbps TOKEN RING, ATM UP TO 155 Mbps, 550 MHz BROADBAND VIDEO AND STANDARDS UNDER DEVELOPMENT SUCH AS ATM AT 622 Mbps, 1.2 & 2.4 Gbps.

CONSTRUCTION

PRIMARIES: CONDUCTOR: 24 AWG (.5 mm) SOLID BARE COPPER
INSULATION: THERMOPLASTIC POLYOLEFIN

PAIR ASSEMBLY: 2 PRIMARIES TWISTED IN VARIED LAYS

COLOR CODE: SEE TABLE 1 (WHITE CONDS HAVE INTEGRAL STRIPE TO MATCH THEIR MATE)

CABLE ASSEMBLY: 4 PAIRS CABLED TOGETHER WITH A FLEXWEB CORE SEPARATOR

JACKET: MATERIAL: BLACK POLYETHYLENE
NOMINAL WALL: .040" (1.02 mm)
NOMINAL DIAMETER: .271" (6.88 mm)

NOTE: CABLE FLOODED FOR MOISTURE PROTECTION

PHYSICAL CHARACTERISTICS

CABLE WEIGHT: 36 lbs/1000ft (54 kg/km)

BEND RADIUS: 2.75" (70 mm) MIN (10 x CABLE OD)

OPERATING TEMP.: -40°C to +60°C (-40°F to +140°F)

STORAGE TEMP.: -40°C to +75°C (-40°F to +167°F)

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

*THE INSTALLATION TEMPERATURE REFERS TO THE TEMPERATURE OF THE CABLE WHILE BEING INSTALLED OR PULLED.

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ELECTRICAL CHARACTERISTICS (REF TABLE 2)

STANDARDS:	EXCEEDS TIA/EIA 568-B.2-1 CAT 6, ISO/IEC 11801:2002 CAT 6, & IEC 61156-5 CAT 6 HORIZONTAL CABLE	RETURN LOSS (RL):	20 + 5 log ₁₀ (f) dB MIN (1-10 MHz) 25 dB MIN (>10-20 MHz) 25 - 7 log ₁₀ (f/20) dB MIN (>20 MHz)
VOLTAGE RATING:	300 VOLTS	INSERTION LOSS:	1.795 f + .017 f + $\frac{.02}{f}$ dB/100m MAX
CONDUCTOR DCR:	8.9 Ω/100m (27.1 Ω/Mft) MAX	NEAR END CROSSTALK (NEXT):	45.3 - 15 log ₁₀ (f/100) dB/100m MIN
DCR UNBALANCE:	3% MAX	POWER SUM NEAR END CROSSTALK (PS-NEXT):	43.3 - 15 log ₁₀ (f/100) dB/100m MIN
MUTUAL CAPACITANCE:	51.5 pF/m (15.7 pF/ft) NOM	EQUAL LEVEL FAR END CROSSTALK (ELFEXT):	30 - 20 log ₁₀ (f/100) dB/100m MIN
CAPACITANCE UNBALANCE PAIR/GROUND:	66 pF/100m (200 pF/Mft) MAX	POWER SUM EQUAL LEVEL FAR END CROSSTALK (PS-ELFEXT):	28 - 20 log ₁₀ (f/100) dB/100m MIN
CHARACTERISTIC IMPEDANCE:	100 Ω ± 15% (1-350 MHz)	PROPAGATION DELAY:	534 + 36 / f ns/100m MAX
INPUT IMPEDANCE:	100 Ω ± 15% (1-100 MHz) 100 Ω ± 18% (>100-200 MHz) 100 Ω ± 22% (>200-350 MHz)	DELTA DELAY (SKEW):	25 ns/100m MAX
		NOMINAL VELOCITY OF PROPAGATION (NVP):	65%

WHERE f = FREQUENCY IN MHz from .772 to 350 MHz, except for ELFEXT and PS-ELFEXT from 1 to 350 MHz.

TABLE 2

REFERENCE ELECTRICAL CHARACTERISTICS

FREQ (MHz)	INSERTION LOSS (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)	PS-NEXT (dB/100m)		PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	RL (dB)
	avg	max	avg	min	min	avg	min	min	min	min	min
.772	1.6	1.8	86	77.0	75.2	80	75.0	73.2	-	-	-
1.0	1.8	2.0	82	75.3	73.3	75	73.3	71.3	70.0	68.0	20.0
4.0	3.5	3.8	73	66.3	62.5	65	64.3	60.5	58.0	56.0	23.0
8.0	5.0	5.3	69	61.8	56.5	61	59.8	54.5	51.9	49.9	24.5
10.0	5.6	5.9	67	60.3	54.4	60	58.3	52.4	50.0	48.0	25.0
16.0	7.1	7.5	66	57.2	49.7	58	55.2	47.7	45.9	43.9	25.0
20.0	7.9	8.4	64	55.8	47.4	56	53.8	45.4	44.0	42.0	25.0
25.0	8.9	9.4	63	54.3	44.9	54	52.3	42.9	42.0	40.0	24.3
31.25	10.0	10.6	62	52.9	42.3	53	50.9	40.3	40.1	38.1	23.6
62.5	14.4	15.3	58	48.4	33.1	49	46.4	31.1	34.1	32.1	21.5
100.0	18.5	19.7	54	45.3	25.6	45	43.3	23.6	30.0	28.0	20.1
155.0	23.5	25.0	52	42.4	17.4	43	40.4	15.4	26.2	24.2	18.8
200.0	27.2	28.8	50	40.8	12.0	42	38.8	10.0	24.0	22.0	18.0
250.0	30.7	32.6	49	39.3	6.7	40	37.3	4.7	22.0	20.0	17.3
300.0	34.0	36.2	48	38.1	2.0	39	36.1	0.0	20.5	18.5	16.8
350.0	37.2	39.5	47	37.1	-	38	35.1	-	19.1	17.1	16.3
400.0	40.2	42.7	46	36.3	-	37	34.3	-	-	-	15.9
500.0	45.8	48.6	45	34.8	-	36	32.8	-	-	-	15.2
550.0	48.4	51.5	44	34.2	-	35	32.2	-	-	-	14.9

VALUES ABOVE 350 MHz ARE FOR ENGINEERING INFORMATION ONLY.

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

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