

VersaLAN™

Category 5e Indoor/Outdoor CM

PART # M58783

25 Pair #24 AWG UTP Category 5e Cable

DESCRIPTION

THIS I/O (INDOOR/OUTDOOR) CABLE IS SUITABLE FOR USE IN BUILDINGS IN WET LOCATIONS AND SUITABLE FOR USE OUTDOOR IN DUCT, FOR AERIAL LASHING AND DIRECT BURIAL. IT IS FULLY WATER BLOCKED AND HAS A BLACK SUNLIGHT RESISTANT JACK-ET. THIS PRODUCT AND/OR ITS MANUFACTURE IS COVERED BY US PATENT NOS. 5821466 & 5424491.

THE CABLE IS NEC RATED FOR GENERAL PURPOSE COMMUNICATIONS USE IN ACCORDANCE WITH ARTICLE 800 OF THE NATIONAL ELECTRICAL CODE (NEC). THE CABLE IS UL (USA) & cUL (CANADA) LISTED FOR THIS APPLICATION BY PASSING UL 1581 VERTICAL TRAY FLAME TEST.

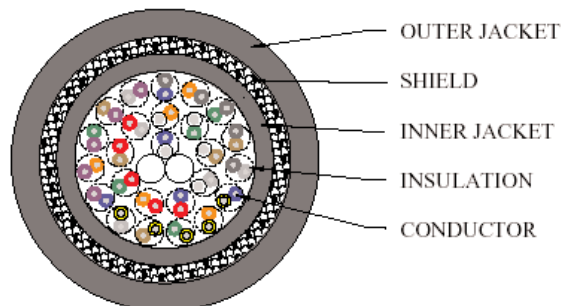
THIS CABLE COMPLIES WITH THE EU-RoHS DIRECTIVE 2002/95/EC (RESTRICTIONS ON HAZARDOUS SUBSTANCES) REGULATIONS.

SUPPORTED APPLICATIONS

10BASE-T (ETHERNET), 100BASE-T (FAST ETHERNET), AND 1000BASE-T (GIGABIT ETHERNET), FDDI TP-PMD, IEEE 802.5 4 AND 16 Mbps TOKEN RING, ATM UP TO 155 Mbps, AND STANDARDS UNDER DEVELOPMENT SUCH AS ATM AT 622 Mbps.

CONSTRUCTION

PRIMARIES:	CONDUCTOR: 24 AWG (.5 mm) SOLID BARE COPPER INSULATION: THERMOPLASTIC POLYOLEFIN
PAIR ASSEMBLY:	2 PRIMARIES TWISTED IN VARIED LAYS
CABLE ASSEMBLY:	25 PAIRS CABLED TOGETHER
BINDER:	OVERALL OPEN BINDER
INNER JACKET:	MATERIAL: MEDIUM DENSITY POLYETHYLENE NOMINAL WALL: .040" (1.0 mm) NOMINAL DIAMETER: .510" (12.95 mm) COLOR: BLACK
SHIELD:	CORRUGATED ALUMINUM TAPE .008" (.20 mm)
OUTER JACKET:	MATERIAL: FR POLYOLEFIN NOMINAL WALL: .060" (1.5 mm) NOMINAL DIAMETER: .730" (18.54 mm) COLOR: BLACK
NOTE:	CABLE IS FLOODED FOR MOISTURE PROTECTION
PRINT:	MOHAWK VERSALAN(TM) CAT 5E 25PR 24 AWG C(UL)US CM-LS --- ROHS M58783 (DATE CODE) ☞ (W/SEQ FOOTAGE MARKERS)
LISTINGS:	C(UL)US TYPE CM-LS



PHYSICAL CHARACTERISTICS

CABLE WEIGHT:	332 lbs/1000ft (494 kg/km)
BEND RADIUS:	11.0" (279 mm) MIN (15 x CABLE OD)
PULLING TENSION:	165 lbf (750 N) MAX
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.

FLAME & SMOKE CHARACTERISTICS

FLAME TESTS:	UL 1581 VERTICAL TRAY, IEEE 383, IEC 332-1, UL VW-1, CSA FT1
LIMITED SMOKE:	-LS PER UL 1685
SMOKE DENSITY:	IEC 1034
COMBUSTION GASSES:	IEC 754-2

VersaLAN™ Category 5e Indoor/Outside CM

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ELECTRICAL CHARACTERISTICS (REF TABLE)

STANDARDS:	TIA 568-B.2 CAT 5e BACKBONE CABLE, MEETING POWER SUM NEXT, ANSI/ICEA S-99-689-1997	INSERTION LOSS:	$1.967 \sqrt{f} + \frac{.023f}{\sqrt{f}}$ dB/100m MAX
VOLTAGE RATING:	300 VOLTS	POWER SUM NEAR END CROSSTALK (PS-NEXT):	$32.3 - 15 \log_{10}(f/100)$ dB/100m MIN
CONDUCTOR DCR:	9.38 Ω /100m (28.6 Ω /Mft) MAX	POWER SUM EQUAL LEVEL FAR END CROSSTALK (PS-ELFEXT):	$20.8 - 20 \log_{10}(f/100)$ dB/100m MIN
CAPACITANCE:	51.5 pF/m (15.7 pF/ft) NOM	PROPAGATION DELAY:	$534 + 36 / \sqrt{f}$ ns/100m MAX
CAPACITANCE UNBALANCE PAIR/GROUND:	330 pF/100m (1000 pF/Mft) MAX	DELTA DELAY (SKEW):	45 ns/100m MAX
CHARACTERISTIC IMPEDANCE:	100 $\Omega \pm 15\%$ (1-100 MHz)	NOMINAL VELOCITY OF PROPAGATION (NVP):	65%
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)	WHERE f = FREQUENCY IN MHz from .772 to 100 MHz.	

REFERENCE ELECTRICAL CHARACTERISTICS

FREQ (MHz)	INSERTION LOSS (dB/100m) (dB/mft)			PS-NEXT (dB/100m)		PS-ACR* (dB/100m)	PS-ELFEXT (dB/100m)	RL (dB)
	avg	max	max	avg	min	min	min	min
.772	1.5	1.8	5.5	70	64.0	62.2	-	-
1.0	1.9	2.0	6.3	68	62.3	60.3	60.8	20.0
4.0	3.8	4.1	13	57	53.3	49.2	48.7	23.0
8.0	5.4	5.8	18	54	48.8	43.0	42.7	24.5
10.0	6.1	6.5	20	52	47.3	40.8	40.8	25.0
16.0	7.8	8.2	25	50	44.3	36.1	36.7	25.0
20.0	8.8	9.3	28	48	42.8	33.5	34.7	25.0
25.0	9.9	10.4	32	47	41.3	30.9	32.8	24.3
31.25	11.1	11.7	36	46	39.9	28.2	30.9	23.6
62.5	16.0	17.0	52	42	35.4	18.4	24.8	21.5
100.0	20.5	22.0	67	38	32.3	10.3	20.8	20.1

*ACR -- ATTENUATION TO CROSSTALK RATIO

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

MOHAWK
Cabling Excellence for Open Architecture

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