ABA Industry, Inc.

Specification for Approval

Product Part Number

- TSP2404N70XX

Product Description

- F/UTP, 23AWG solid bare copper, CAT.6, CMP
- With cross filler
- Overall metal foil screen with drain wire

Product Features

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 400 MHz.

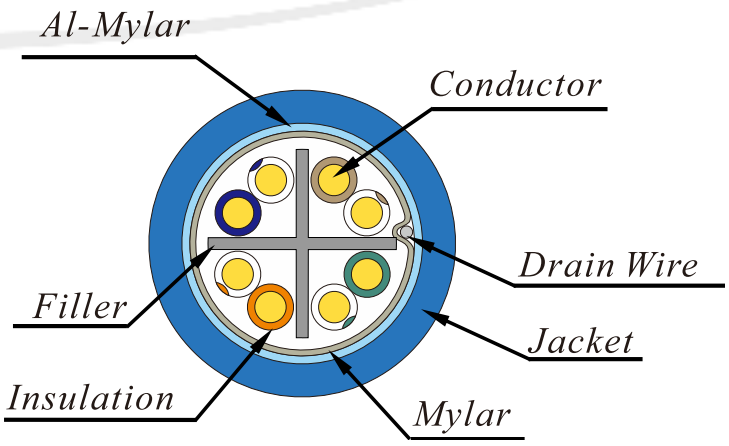
Application

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Overall metal shielded providing good protection from EMI noise.
- IEEE 802.3ab 1000BASE-T, 1000BASE-TX and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

Applicable Standard

- Electrical Transmission
  - ANSI/TIA-568-C.2 (2009)
  - ISO/IEC 11801 (Edition 2.2)
  - IEC 61156-5 (Edition 2.0)
- Flame Test
  - NFPA 262 (CMP)
- Material and Construction
  - UL 444
  - CSA 22.2 NO.214
- EU Directive 2011/65/EC (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

Sectional Drawing



Establish Date	2014.03.01	Edition	1.1	Revised Date	2014.10.13

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Material and Construction

Conductor	Material	23AWG solid bare copper

Insulation	Material	Fluorinated Ethylene Propylene (FEP)	
	Color code & diameter	Blue & white/blue Stripe	1.04 ± 0.02 mm
		Orange & white/orange stripe	1.00 ± 0.02 mm
		Green & white/green stripe	1.04 ± 0.02 mm
		Brown & white/brown stripe	1.00 ± 0.02 mm

Twisted	Description	Left hand direction

Filler	Material	Fluorinated Ethylene Propylene (FEP)

Assembly	Description	Left hand direction

Shield	Material	Mylar tape

Drain wire	Material	24AWG solid tinned copper

Shield	Material	Al Mylar tape
	Description	100 % coverage and mylar side facing out

Jacket	Material	Low smoke flame retardant polyvinyl chloride (LSFRPVC)
	Diameter	6.70 ± 0.2 mm
	Thickness	0.43 ± 0.03 mm
	Color	Per customer`s request

Marking	ELITE 1000X CAT 6 GIGASYSTEM TESTED TO 400MHz---E142890 FTP 4PR 23AWG 75℃ CMP(PCC-FT6) C(UL)US---ETL VERIFIED TO TIA-568-C.2 ISO/IEC 11801 mmyy[1] RoHS COMPLIANT XXXXFT Note 1: mmyy is date code.

Usage & Environmental Condition

Temperature range	Storage & shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C

Minimum bending radius	≥ 4 times of overall diameter

Maximum pulling tension	≤ 110 N

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Physical & Electrical Characteristics (at 20°C)

Temperature & voltage rating	75°C / 300V
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance unbalance	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ・m
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m

Transmission Performance (at 20°C)

Frequency (MHz)	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
	Max. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Max. ns/100m	Max. ns/100m
1	2.03	77.30	75.30	75.28	73.28	70.80	67.80	20.00	570.00	45.00
4	3.78	68.27	66.27	64.49	62.49	58.76	55.76	23.01	552.00	
8	5.32	63.75	61.75	58.43	56.43	52.74	49.74	24.52	546.73	
10	5.95	62.30	60.30	56.35	54.35	50.80	47.80	25.00	545.38	
16	7.55	59.24	57.24	51.68	49.68	46.72	43.72	25.00	543.00	
20	8.47	57.78	55.78	49.31	47.31	44.78	41.78	25.00	542.05	
25	9.51	56.33	54.33	46.83	44.83	42.84	39.84	24.32	541.20	
31.25	10.67	54.88	52.88	44.20	42.20	40.90	37.90	23.64	540.44	
62.5	15.38	50.36	48.36	34.98	32.98	34.88	31.88	21.54	538.55	
100	19.80	47.30	45.30	27.50	25.50	30.80	27.80	20.11	537.60	
150	24.71	44.66	42.66	19.95	17.95	27.28	24.28	18.87	536.94	
200	28.98	42.78	40.78	13.80	11.80	24.78	21.78	18.00	536.55	
250	32.85	41.33	39.33	8.48	6.48	22.84	19.84	17.32	536.28	
300	36.43	40.14	38.14	3.72	1.72	21.26	18.26	16.77	536.08	
350	39.79	39.14	37.14	N.A.	N.A.	19.92	16.92	16.30	535.92	
400	42.97	38.27	36.27	N.A.	N.A.	18.76	15.76	15.89	535.80	

Values above 250MHz are for information only.

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Shipping Information

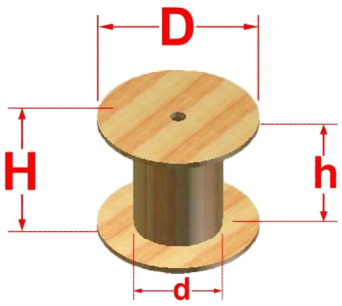
Item	Dimension	Nominal net weight
Cable	305 m	17.52 kg (38.62 lb)
Plywood reel	D400 x d220 x H270 x h250 mm	2.0 kg
Pallet	1150 x1150 x120 mm	14.1 kg

Container type	Capacity of pallet	Capacity of reel
20 feet	20	420
40 feet	40	840

Shipping could use standard delivery form or per customer`s request.

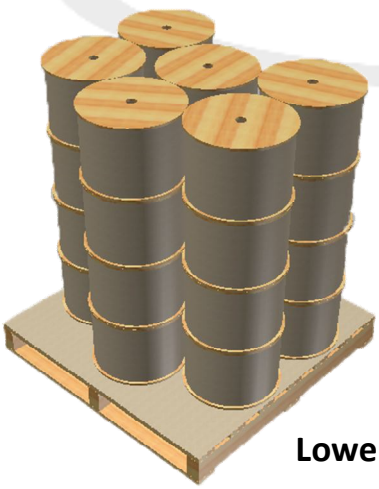
Schematic Drawing of Reel & Package

Fumigated plywood reel.

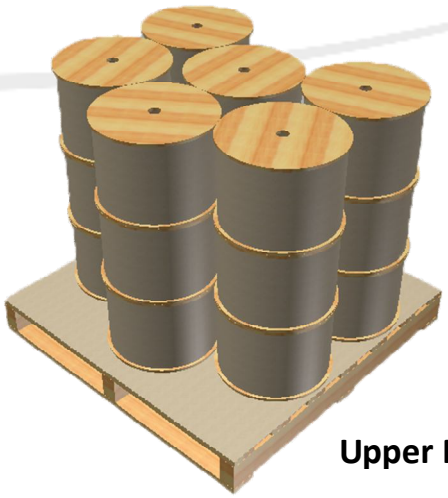


Schematic Drawing of Package

Each package of pallet delivered with plastic wrap and packing strap.



Lower Pallet



Upper Pallet

Revised Information

Edition	Revised Description	Revised Date
1.1	Revised transmission performance table.	2014.10.13