

Elite 10GX™ CAT6A 10G LAN 4 *STP Cable

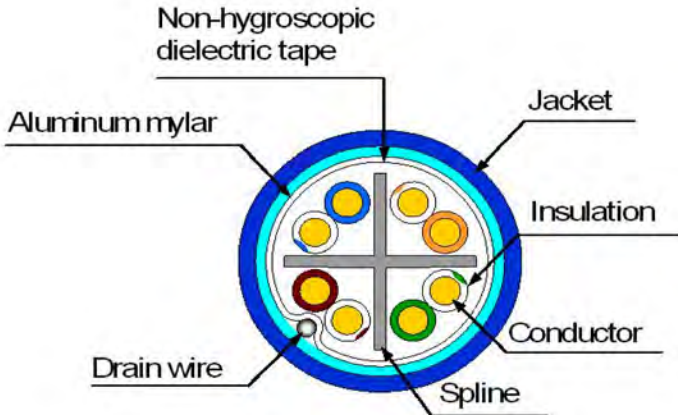
Construction:

*Shielded Twisted Pair

Item #	Flame Rating	Jacket	Color	Wt. Lb. / Wt.Kg	O.D.	Packaging Put-Up
TSR2304S03GY	CMR	PVC Riser	Gray	40.4 / 18.3	7.60 ± .2mm	1000' Wood Reel
TSP2304S03xGY	CMP	Plenum	Gray	45.64 / 20.7	7.60 ± .2mm	1000' Wood Reel

PRODUCTS FEATURE

- ELITE 10GX LAN SUPPORTS IEEE 802.3an 10GBASE-T STANDARD, AND TIA/EIA 568-B.2-10 DRAFT.9
- ALL MATERIALS COMPLY WITH ROHS STANDARD
- TEST RANGE FROM 1 TO 650 MHZ
- Smaller OD's compared to Elite 10GS
- Great Headroom with up to 4dB.



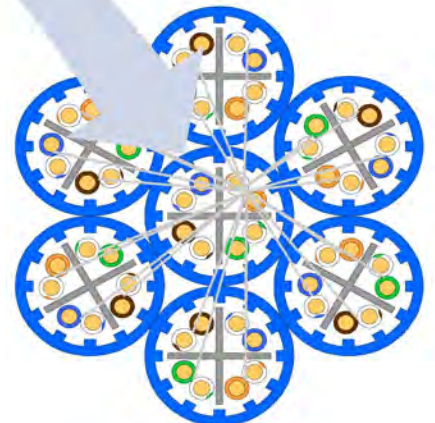
CONSTRUCTION RISER/PLENUM

- Jacket: Low-smoke, flame-retardant PVC
- Insulation: PE/FEP
- Spline: PE/FEP
- Conductor: 23 AWG Solid bare copper
- Cable assembly: 4 pairs cabled together with a spline core separator

Disturbed Cable

6-around-1 cable test configuration:

This test is for measuring alien crosstalk loss between pairs of adjacent cables in a 7-cable assembly consisting of the same design. Measure the ANEXT loss and AFEXT loss between each of the pairs of the **disturbed** cable and each pair of every disturbing cable. This will result in 96 measurements each for ANEXT loss and AFEXT loss.



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ELECTRICAL PROPERTIES FOR BOTH RISER AND PLENUM

CONDUCTOR DCR: 9.38W/100M@20°
DCR UNBALANCE: 3%MAX
CAPACITANCE UNBALANCE
PAIR/GROUND: 330PF/100M MAX
CHARACTERISTIC IMPEDANCE: 100Ω ±10%(10-550MHz)
INPUT IMPEDANCE: 100Ω ±12%(1-100MHz)
 100Ω ±15%(>100-350MHz)
 100Ω ±22%(>350MHz)
RETURN LOSS: 20+7log(f) dB MIN (1-10MHz)
 27 dB MIN(10-20MHz)
 27-7log(f/20)dB MIN (>20MHz)
INSERTION LOSS: 1.8√f+0.01f+0.2√f dB/100M MAX
(ATTENUATION) NEAR END(NEXT) CROSSTALK:
 44.3 - 15 log(f/100) dB/100M MIN

POWER SUM NEAR END CROSSTALK (PS NEXT):
 42.3- 15log(f/100) dB/100M MIN
ATTENUATION TO CROSSTALK RATIO FAR END(ACRF):
 31.8- 20log(f/100) dB/100M MIN
POWER SUM ATTENUATION TO CROSSTALK RATIO FAR END (PS ACRF): 28.8- 20 log(f/100) dB/100M MIN
POWER SUM ALIEN NEAR END CROSSTALK (PS ANEXT):
 66.5- 15 log(f/100) dB/100M MIN
POWER SUM ALIEN ATTENUATION TO CROSSTALK RATIO FAR END (PS AACRF): 42.2- 20 log(f/100) dB/100M MIN 67dB MIN
PROPAGATION DELAY: 534 + 36/ ns/100m MAX
PROPAGATION DELAY SKEW: 25 ns/100m MAX
NOMINAL VELOCITY OF PROPAGATION (NVP):
 70% PLENUM 66% NON-PENUM
NOTE: Attenuation To Crosstalk Ratio Far End (ACRF) was previously referred to as Equal Level Far End Crosstalk (ELFEXT) WHERE f = FREQUENCY IN MHz from 1 to 500 MHz

REFERENCE ELECTRICAL CHARACTERISTICS

FREQ (MHz)	INS LOSS (dB/100m)	RETURN LOSS (dB/100m)	NEXT (dB/100m)	PS NEXT (dB/100m)	ACRF (dB/100m)	PS ACRF (dB/100m)	PROP DELAY (dB/100m)	ALIEN CROSSTALK	
								PS ANEXT (dB/100m)	PS AACRF (dB/100m)
	max	min	Min	min	min	min	max	min	min
1	2	20	74.3	72.3	71.8	68.8	570	71	71
4	3.7	24.2	65.3	63.3	59.8	56.8	552	71	70.2
8	5.2	26.3	59.8	58.8	53.7	50.7	546.7	71	64.1
10	5.9	27	59.3	57.3	51.8	48.8	545.4	71	62.2
16	7.4	27	56.2	54.2	47.7	44.7	543	71	58.1
20	8.3	27	54.8	52.8	45.8	42.8	542	71	56.2
25	9.3	26.3	53.3	51.3	43.8	40.8	541.2	71	54.2
31.25	10.4	25.6	51.9	49.9	41.9	38.9	540.4	71	52.3
62.5	14.9	23.5	47.4	45.4	35.9	32.9	538.6	69.6	46.3
100	19	22.1	44.3	42.3	31.8	28.8	537.6	66.5	42.2
155	24	20.8	41.4	39.4	28	25	536.9	63.6	38.4
200	27.5	20	39.8	37.8	25.8	22.8	536.5	62	36.2
250	31	19.3	38.3	36.3	23.8	20.8	536.3	60.5	34.2
300	34.2	18.8	37.1	35.3	22.3	19.3	536.1	59.3	32.7
350	37.2	18.3	36.1	34.1	20.9	17.9	535.9	58.3	31.3
400	40	17.9	35.3	33.3	19.8	16.8	535.8	57.5	30.2
500	45.3	17.5	33.8	31.8	17.8	14.8	535.6	56	28.2
550	47.7	17.2	33.2	31.2	-	-	-	-	-
600	50.1	16.9	32.6	30.6	-	-	-	-	-
650	52.4	16.7	32.1	30.1	-	-	-	-	-

