PRODUCT SPECIFICATION DRAWING Proprietary Information not to be reproduced								
			5E, STRANDE	D T.C.	COND., SHIELDED, LSZI IT CATEGORY 5E CABLI	H THERMO		
				— Т.	EXANE ZH LSZH JKT .C. BRAID SHIELD OMPONENT 1			
<u>CONS</u> 1.0	STRUC		2 PAIRS RE		Ð		NOMINA (Inches	AL DIAMETER
<u>1.0</u>	<u></u> 1.1				ed Copper Cond. (0.355	mm2)	0.030	0.762
	1.2	Insulation:	Solid, Colored	l, Cros Thickn	s-Linked LSZH Polyolefir less .014 inches		0.062 0.064	
	1.3	Color Code:	Pair #1	Yellov Orang				
			Pair #2	White Blue				
	1.4	Pair Construe	as abc	ove, wit	ated Conductors, Color C h staggered Left Hand La sstalk.		0.124	3.149
<u>2.0</u>	<u>CABL</u>	<u>.E:</u>						
	2.1	<u>Core:</u>	(2) Componer Left Hand Lay		e twisted together with a		0.204	5.181
	2.2	<u>Tape:</u>	Binder tape	4	5% lap		0.215	5.461
<u>3.0</u>	<u>SHIEI</u>	LD:	36 AWG T.C.,	88% I	Min. Coverage		0.237	6.020
	3.1	<u>Tape:</u>	Binder tape				0.255	6.477
	ROCKE SURPRE	NANT Fax:	(860) 653 - 8300 (860) 653 - 8301		Drawn By: Gil Shoshani	Date: 6-26		Page: 1 of 3
	CABLE CORF		.: ED04022-004		Reviewed By: Walt Drabek	Revision:	3-PN	DWG Number: TD-009511

Proprietary Information not to be reproduced Product Title: 2 PR 22 AWG CAT 5E, STRANDED T.C. COND., SHIELDED, LSZH THERMOSET INSULATION, THERMOSET EXANE-ZH LSZH JACKET, TRANSIT CATEGORY 5E CABLE, ROHS AND REACH COMPLIANT

PRODUCT SPECIFICATION DRAWING

<u>4.0</u>	JACKET:	Black, Irradiation Cross-Linked LSZH Exane-ZH		
		Wall Thickness .025 inches, Nom.	0.310	7.874
		Minimum Diameter:	0.305	7.747
		Maximum Diameter:	0.315	8.000

5.0 MARKING: Jacket is printed in White ink as follows:

"RSCC TD-009511 2 PR 22 AWG 7/30 CAT 5E SHIELDED 100 OHMS 125°C EXANE ZH JACKET 600V AC or DC ED04022-004 (year of manufacture, shop order, sequential footage)"

6.0 ELECTRICAL TESTS:

6.1 Individual insulated conductors will be tested using a high frequency spark tester at 3.0 KV(AC).

7.0 TECH DATA:

- 7.1 Impedance:
- 7.2 Temperature Rating:
- 7.3 Conductor Resistance:
- 7.4 Mutual Capacitance:
- 7.5 Velocity of Propagation:
- 7.6 Propagation Delay:
- 7.7 Bend Radii:

100 Ohms +/- 15% from 1.0MHz to 100 MHz -55°C to +90°C 17.54 Ohms/1,000 ft at 20°C, Nom. 15 pF/ft, Nominal. 66%, Nominal. 538 ns/100 m, Max. at 100 MHz. Based on Overall Diameter and Refers to Inside Radius Of Bend and not to the Neutral Axis: Static = 3.15 in (80 mm), Min. Dynamic = 6.30 in (160 mm), Min. 53 lbs./1000 ft

- 7.8 Weight:
- 7.9 Transmission Data:

MHz	Max. Attenuation dB/100m	Min. NEXT dB	Min. PSNEXT dB	Min. ACR dB	Min. PSACR dB	Min. Return Loss dB	Min. ELFEXT dB
1	2.4	65.3	62.3	63.8	60.8	20.0	63.8
4	4.9	56.3	53.3	51.8	48.8	23.0	51.7
8	7.0	51.8	48.8	45.7	42.7	24.5	45.7
10	7.8	50.3	47.3	43.8	40.8	25.0	43.8
16	9.8	47.3	44.2	39.7	36.7	25.0	39.7
20	11.1	45.8	42.8	37.8	34.8	25.0	37.7
25	12.5	44.3	41.3	35.8	32.8	24.3	35.8
31.25	14.0	42.9	39.9	33.9	30.9	23.6	33.9
62.5	20.4	38.4	35.4	27.9	24.9	21.5	27.8
100	26.4	35.3	32.3	23.8	20.8	20.1	23.8

IIII ROCKBESTOS SURPRENANT	Phone: (860) 653 - 8300 Fax: (860) 653 - 8301	Drawn By: Gil Shoshani	Date: 6-26-18	Page: 2 of 3
CABLE CORPORATION	Part No.:	Reviewed By:	Revision: 3-PN	DWG Number:
ENGINEERED WIRE AND CABLE	ED04022-004	Walt Drabek		TD-009511

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8.0 SPECIFICATION:

8.1 EIA/TIA 568-C.2 for Category 5e cables. Special features include stranded Tinned Copper conductors to provide flexibility, thermoset cross linked insulation, Exane-ZH LSZH Jacket to meet the requirements for transit application for Flame, Smoke & Toxicity. The cable is **ROHS** and **REACH** compliant.

9.0 FLAME & SMOKE (NFPA 130-2010, 2014, 2017):

Passes the spread of fire and smoke emissions test requirements for low voltage wire and cable in accordance with NFPA 130-2010, 2014, 2017 Article 8.6.7.1.1 for transit vehicle application.

- **9.1** Passes the 70,000 Btu/hr Vertical Cable Tray Flame Test, FT4/IEEE 1202 by having a flame travel distance that does not exceed 1.5 m (4 ft 11 in).
- **9.2** The total smoke released is $\leq 150 \text{ m}^2 (1615 \text{ ft}^2)$.
- **9.3** The peak smoke release rate is $\leq 0.40 \text{ m}^2/\text{s}$ (4.3 ft²/s).
- **<u>10.0</u> <u>FLAME</u>:** Passes the flame test requirement of 49Code of Federal Regulations (CFR), Part 238 Appendix B, in accordance with NEMA WC 3/ICEA S-19-81, paragraph 6.19.6.
- **<u>11.0</u> SMOKE:** Passes the smoke test requirement of 49Code of Federal Regulations (CFR), Part 238 Appendix B, in accordance with ASTM E662-97:

Flaming D_s (4.0 minutes)	≤ 200
Non-Flaming D_s (4.0 minutes)	≤ 75

Requirement (Max.)

<u>12.0</u> <u>TOXICITY:</u> Passes Toxicity Test requirements when tested in accordance with Boeing Specification Support Standard (BSS) 7239:

Chemical

	(CO2)	90,000 ppm
Carbon Monoxide	(CO)	2,500 ppm
Hydrogen Fluoride	: (HF)	150 ppm
Hydrochloric Acid	(HCL)	300 ppm
Nitrous Fumes	(NO2)	100 ppm
Sulfur Dioxide	(SO2)	100 ppm
Hydrocyanic Acid	(HCN)	100 ppm

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