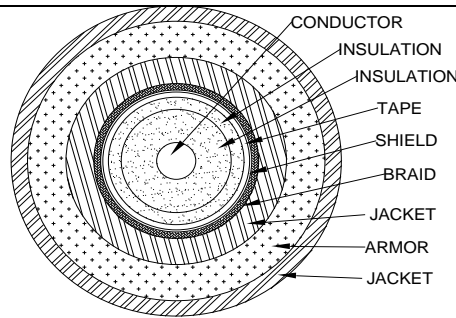


6 AWG 50 Ohm VITALink® Coaxial Circuit Integrity Cable



1. Construction:

- 1.1. Conductors: 6 AWG Solid Oxygen Free Bare Copper, 0.162" Nominal Diameter (4.11 mm)
- 1.2. Insulation: Foamed Polyethylene, 0.222" Nominal Diameter (5.64 mm)
- 1.3. Insulation: Foamed Fire-Roc® Insulation, 0.570" Nominal Diameter (14.48 mm)
- 1.4. Shield: Copper/Polyester Tape, 100% Coverage
- 1.5. Braid: 34 AWG Bare Copper, 75% Coverage
- 1.6. Tape: Heat Resistant Tape, 100% Coverage
- 1.7. Core Wrap: Black Fire-Roc®, 0.792" Nominal Diameter (20.119 mm)
- 1.8. Armor: Copper Continuously Corrugated Welded Armor, Nominal Overall Diameter 1.070" +/- .025" (27.178 mm)

1.9. Armor Print:

COMTRAN VITALink® CMR c(UL)us 1C6 AWG 75C
FRR-2HR FHIT.40C/FHIT7.40C UL2196/ULC S139 MAX
VOLTAGE 72V PN 36691 (MMYY) (01-12345)

- 1.10. Jacket: Red Non-Halogen Flame Retardant Thermoplastic, Nominal Overall Diameter 1.170" +/- .025" (29.718 mm)

1.11. Jacket Print:

COMTRAN VITALink® CMR c(UL)us 1C6 AWG 75C
FRR-2HR FHIT.40C/FHIT7.40C UL2196/ULC S139 MAX
VOLTAGE 72V PN 36692 (MMYY) (01-12345)

Note:

MMYY is a 4-digit month/year
01-12345 = traceability number

2. Compliance:

- 2.1. c(UL)us Listed Type CMR
- 2.2. UL Subject 444 Communications Cable; 300V/75°C Classified
- 2.3. UL 2196/ULC-S139 2-Hour Fire Rating for use in FHIT/FHIT7 System 40C
- 2.4. NFPA 70 & 72
- 2.5. NFPA 130
- 2.6. NFPA 502
- 2.7. California State Fire Marshal Approved
- 2.8. RoHS Compliant



3. Physical Characteristics:

- 3.1. Nominal Weight: 839 lbs./1000 ft
- 3.2. Min Bend Radius: 11.7" (297.18 mm)
- 3.3. Maximum Pull Tension – Straight runs: 210 lbs./ft.

4. Standard Electrical Characteristics:

- 4.1. Nominal Conductor DCR: .40 Ω/1000 Ft
- 4.2. Nominal Shield Resistance: .9 Ω / 1000 Ft.
- 4.3. Inductance: .077 μH/ft. Nominal
- 4.4. Velocity of Propagation: 68% Nominal
- 4.5. Jacket Spark Test Voltage: 10,000 AC

**Note: Impedance during fire conditions tested between 40 and 60 Ohms.



TITLE:		DESCRIPTION	Comtran		 COMTRAN <small>Innovative Systems. Engineered Solutions.</small>  <small>A Marmon Wire & Cable/Berkshire Hathaway Company</small>
DS36692		6 AWG 50 Ohm VITALink® Coaxial Circuit Integrity Cable with Armor and Jacket	330A Turner Street South Attleboro, MA 02703 Phone: 508-399-7004 Fax: 508-399-8839		
Rev	Date	Detail	Eng.	App.	
04	06/24/21	Modified the core diameter	KB	PB	
03	06/14/21	Added Note and Standard Electricals	PB	WD	
02	05/17/21	Redesigned with Overall Jacket	PB	KB	
01	10/29/20	Initial Design	PB	WC	S-2144

Comtran reserves the right to change the information above without prior notification. Comtran assumes no risk, and is not liable for direct or indirect, or consequential damages, resulting from the use of this document

6 AWG 50 Ohm VITALink® Coaxial Circuit Integrity Cable

6 AWG COAX VITALink® Electricals Under Standard Conditions

	Impedance	Return Loss	VSWR	Attenuation
MHz	Ohms	dB		dB/100 ft
100	50 ± 2	36.2	1.032	1.48
200	50 ± 2	35.0	1.036	3.24
300	50 ± 2	28.3	1.080	5.09
400	50 ± 2	26.1	1.104	6.99
500	50 ± 2	25.2	1.116	8.88
600	50 ± 2	24.4	1.129	10.99
700	50 ± 2	22.4	1.165	13.14
800	50 ± 2	20.9	1.200	15.34
900	50 ± 2	20.8	1.201	17.44
1000	50 ± 2	20.7	1.203	19.97

TITLE:		DESCRIPTION		Comtran 330A Turner Street South Attleboro, MA 02703 Phone: 508-399-7004 Fax: 508-399-8839		 COMTRAN <small>Innovative Systems. Engineered Solutions.</small>  <small>A Marmon Wire & Cable/Berkshire Hathaway Company</small>
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