



CAN-Bus J-1939 Cable

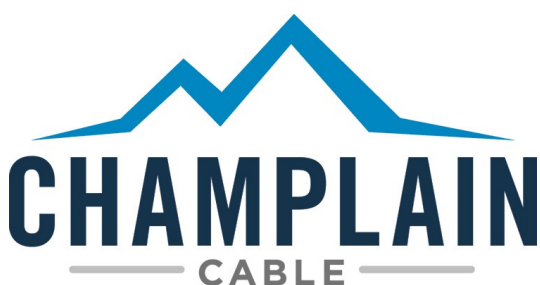


125°C / 150°C, 60V, 120Ω, ROHS Compliant

- EXRAD® Irradiation cross-linked materials provide robust performance
- Shielded options protect signal from EMI / RFI
- Options available with primaries that exceed TXL performance
- Many options available to fit various connectors
- Champlain is a technological leader in controlled impedance cables in the vehicle market
- EXRAD® materials are dielectrically clean which provide for excellent electrical performance
- TWISTIR® technology helps maintain twist integrity and electrical performance
- Highly-Rugged dual-jacket (D) designs available



Part Number	Conductor	Cap. pF/ft	Nom. Velocity	Conductor		Dielectric		Dielectric Insulation	Shield	Jacket Insulation	Filler	Nom. Finished OD	
				in	mm	in.	mm					in	mm
23-00013	.5mm ² (19/18) TC	12	58%	.035	.89	0.94	2.39	150A	Yes	150A (D)	Yes	.325	8.26
23-00028	.5mm ² (19/18) BC	12	58%	.035	.89	.094	2.39	150A	Yes	150A (D)	No	.325	8.26
23-00036	.5mm ² (19/18) BC	12	64%	.045	1.14	.094	2.39	150 UT	Yes	150 FX (D)	No	.325	8.26
23-00037	18 AWG (19/23) BC	12	64%	.045	1.14	.126	3.20	150 UT	Yes	150 FX (D)	No	.398	10.11
23-00033	.5mm ² (19/18) BC	11	72%	.035	.89	.106	2.69	Cell-Rad	Yes	125 ZH	Yes	.300	7.62
23-00065	18 AWG (19/23) BC	11	72%	.045	1.14	.137	3.48	Cell-Rad	Yes	125 ZH	Yes	.352	8.95
23-00072	.5 mm ² (19/18) BC	10	80%	.035	.89	.092	2.34	Cell-Rad	Yes	150 FX	Yes	.250	6.35
23-00076	.5 mm ² (19/18) BC	10	80%	.035	.89	.106	2.69	150 FX	Yes	125 ZH	Yes	.291	7.39
15-07271	20 AWG (7/28) BC	11	64%	.038	.97	.082	2.08	150 UT	No	125 ZH	No	.204	5.18
15-07445	20 AWG (7/28) BC	11	64%	.038	.97	.082	2.08	150 UT	No	150 FX	No	.224	5.64
15-07508	20 AWG (19/32) BC	11	64%	.038	.97	.082	2.08	150 UT	No	150 FX	No	.224	5.64
23-00074	20 AWG (7/28) BC	12	66%	.038	.97	.072	1.83	XLPE	No	125 ZH	No	.208	5.28
23-00070	0.8mm ² (19/23) BC	11	64%	.042	1.07	.084	2.13	150 UT	No	125 ZH	No	.204	5.18
15-07272	18 AWG (19/23) BC	11	64%	.045	1.14	.092	2.34	150 UT	No	150 FX	No	.226	5.74
15-07353	18 AWG (19/23) BC	11	64%	.045	1.14	.092	2.34	150 UT	No	125 ZH	No	.217	5.51

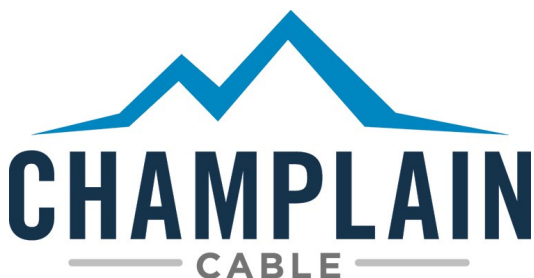




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Property / Attribute		SAE J-1128 TXL Req.	150A	150 UT	150 FX	125ZH	
Dielectric Test	Wet Dielectric after 5 hour soak	1 kV 1 min.	5 kV 30 min	5 kV 30 min	5 kV 30 min.	5 kV 30 min	
Flame Test	Maximum time after burn	70 Sec	<1 sec	9 sec	4 sec	10 sec	
Cold Bend	4 hours at temperature no cracks / breakdown	-40°C	-55°C	-55°C	-70°C	-55°C	
Temperature Rating	240 Hour heat aging	155°C	180°C	180°C	180°C	155°C	
Temperature Rating	3,000 Hours	125°C	150°C	150°C	150°C	125°C	
Tensile	Minimum psi	1,500	2,350	3,000	3,300	3,000	
Elongation	Minimum %	150	300	375	430	220	
Abrasion	Sand Paper Resistance Length in. (14 awg)	8.5	12	65	45	31	
Abrasion	Scrape Cycles (14 awg)	None	NA	NA	148	250	
Pinch	Pounds	9	NA	10.2	18	9	
Ozone Test	192 Hours @ 65°C, 100 pphm no cracks	Pass	Pass	Pass	Pass	Pass	
Engine Oil	ASTM D471, IRM-902	50 +/-3°C	15% Max.	1.8%	1%	1.6%	5%
Gasoline	ASTM D471 Ref. Fuel C	23 +/-5°C	15% Max.	<1%	2%	<1%	3%
Brake Fluid	SAE-J-1703	50 +/-5°C	None	<1.5%	2%	<1%	1%
Ethanol	85% Ethanol + 15% ASTM D471, Ref. Fuel	23 +/-5°C	15% Max.	<1%	1%	<1%	1%
Diesel Fuel	ASTM D471, 90% IRM-903 + 10% p-xylene	23 +/-5°C	None	1.3%	2%	1.8%	1%
Power Steering	ASTM D471, IRM-903	50 +/-3°C	30% Max.	1.5%	1%	1.2%	9%
Auto Transmission	Citgo #33123 SAE-J311	50 +/-3°C	25% Max.	<1%	3%	5.3%	11%
Methanol		23 +/-5°C	15% Max.	<1%	1%	<1%	1%
Engine Coolant	50% Ethylene Glycol + 50% distilled Water	50 +/-3°C	15% Max.	1.4%	<1%	0%	<1%
Battery Acid	H ₂ SO ₄ Specific Gravity = 1.260 +/- .005	23 +/-5°C	5% Max.	<1%	<1%	<1%	<1%

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Manufacturing Locations:

Colchester, Vermont

El Paso, Texas

www.champcable.com