EXRAD® ERGOFLEX™
Unshielded Thin Wall High Voltage Cable

1,000VAC/1,500VDC, ISO-19642-5, Class D, Thin Wall

- Revolutionary EXRAD® ERGOFLEX™ Irradiation Crosslinked Polyolefin (XLPO)
- Meets or Exceeds all ISO-19642-5 Requirements, Including all Fluids
- Ultimate Flexibility, Thin, Fluid Resistant and Tough
- Performs at Higher Temperatures for Longer Periods of Time
- Excellent Compression Set Properties for Connector Sealing: 90% Retention
- Designed to Improve Ergonomics and Reduce Operator Movement / Fatigue

- Sizes from 5.0mm^2 to 95mm^2. Larger sizes up to 250mm^2 are also available.
- 3,000 hours rated at 150°C
- 1,000 VAC and 1,500 VDC Rated
- Flexible and Standard Conductor Stranding available.
- High Current Carrying Capacity
- Excellent Cut-through Resistance

CHAMPLAIN CABLE

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Preferred, ISO Flexible Strand Conductor

Part Number	Bare Copper Conductors	Conductor Diameter mm / nom	Insulation Thickness mm / nom	Finished Diameter mm / nom	Static Bend Radius mm / min	Finished Weight kg/KM nom	Maximum Conductor Resistance 20°C mΩ per M
15-08852	5mm² (245/0.15)	2.79	0.63	4.05	10	48	3.94
15-08900	6mm² (182/0.20)	3.20	0.47	4.15	10	58	3.14
15-08756	8mm² (238/0.20)	3.61	0.59	4.80	12	76	2.38
15-09136	10mm² (322/0.20)	4.19	0.73	5.65	22	102	1.82
15-08644	12mm² (380/0.20)	4.72	0.71	6.15	25	119	1.52
15-08563	16mm² (511/0.20)	5.59	0.60	6.80	27	165	1.16
15-08758	20mm² (610/.20)	6.02	0.69	7.40	30	185	0.955
15-08969	25mm² (798/.20)	6.86	0.72	8.30	33	237	0.743
15-08652	30mm² (912/0.20)	7.06	1.07	9.20	37	290	0.647
15-08643	35mm² 1083/0.20)	7.49	1.1	9.90	39	334	0.527
15-08657	40mm² (1235/0.20)	8.56	0.99	10.50	42	380	0.473
15-08638	50mm² (1615/0.20)	9.63	0.99	11.60	46	477	0.368
15-08967	60mm² (1843/0.20)	10.44	1.09	12.65	51	544	0.315
15-08562	70mm² (2128/0.20)	11.53	1.09	13.70	55	673	0.259
15-08968	85mm² (2660/0.20)	12.52	1.24	15.00	60	798	0.219
15-08544	95mm² (2926/0.20)	13.23	1.02	15.90	64	894	0.196
15-08997*	120mm² (3885/0.20)	14.45	1.78	18.55	72	1,145	0.153
15-08998*	150mm² (4788/0.20)	18.42	1.52	22.00	86	1,460	0.130

Optional, ISO Standard Strand Conductor

Part Number	Bare Copper Conductors	Conductor Diameter mm / nom	Insulation Thickness mm / nom	Finished Diameter mm / nom	Static Bend Radius mm / min	Finished Weight kg/KM nom	Maximum Conductor Resistance 20℃ mΩ per M
15-08642	5mm² (70/0.29)	2.72	0.66	4.05	16	50	3.94
15-08560	6mm² (84/0.29)	2.92	0.61	4.15	17	61	3.14
15-08955	8mm² (119/0.28)	3.71	0.55	4.80	19	76	2.38
15-08755	10mm² (147/0.29)	4.19	0.73	5.65	22	98	1.82
15-08561	12mm² (175/0.29)	4.72	0.71	6.15	25	119	1.52
15-08370	16mm² (224/0.30)	5.59	0.60	6.80	27	165	1.16
15-08963	20mm² (273/.29)	6.20	0.61	7.40	30	185	0.955
15-08553	25mm² (364/.29)	6.86	0.72	8.30	33	237	0.743
15-08956	30mm² (418/0.29)	7.32	0.91	9.20	37	279	0.647
15-08753	35mm² (511/0.29)	8.10	0.90	9.90	39	334	0.527
15-08957	40mm² (551/0.29)	8.56	0.99	10.50	42	380	0.473
15-08958	50mm² (722/0.29)	9.63	0.99	11.60	46	477	0.368
15-08959	60mm² (836/0.29)	10.44	1.09	12.65	51	544	0.315
15-08960	70mm² (1026/0.29)	11.53	1.09	13.70	55	673	0.259
15-08961	85mm² (1197/0.29)	12.52	1.24	15.00	60	798	0.219
15-08962	95mm² (1330/0.30)	13.23	1.32	15.90	64	894	0.196
15-08995*	120mm² (1729/0.29)	14.86	1.57	18.00	90	1,141	0.153
15-08996*	150mm² (2147/0.29)	16.54	1.83	20.20	101	1,421	0.130

* Custom design, product not defined in ISO 19642 Standards

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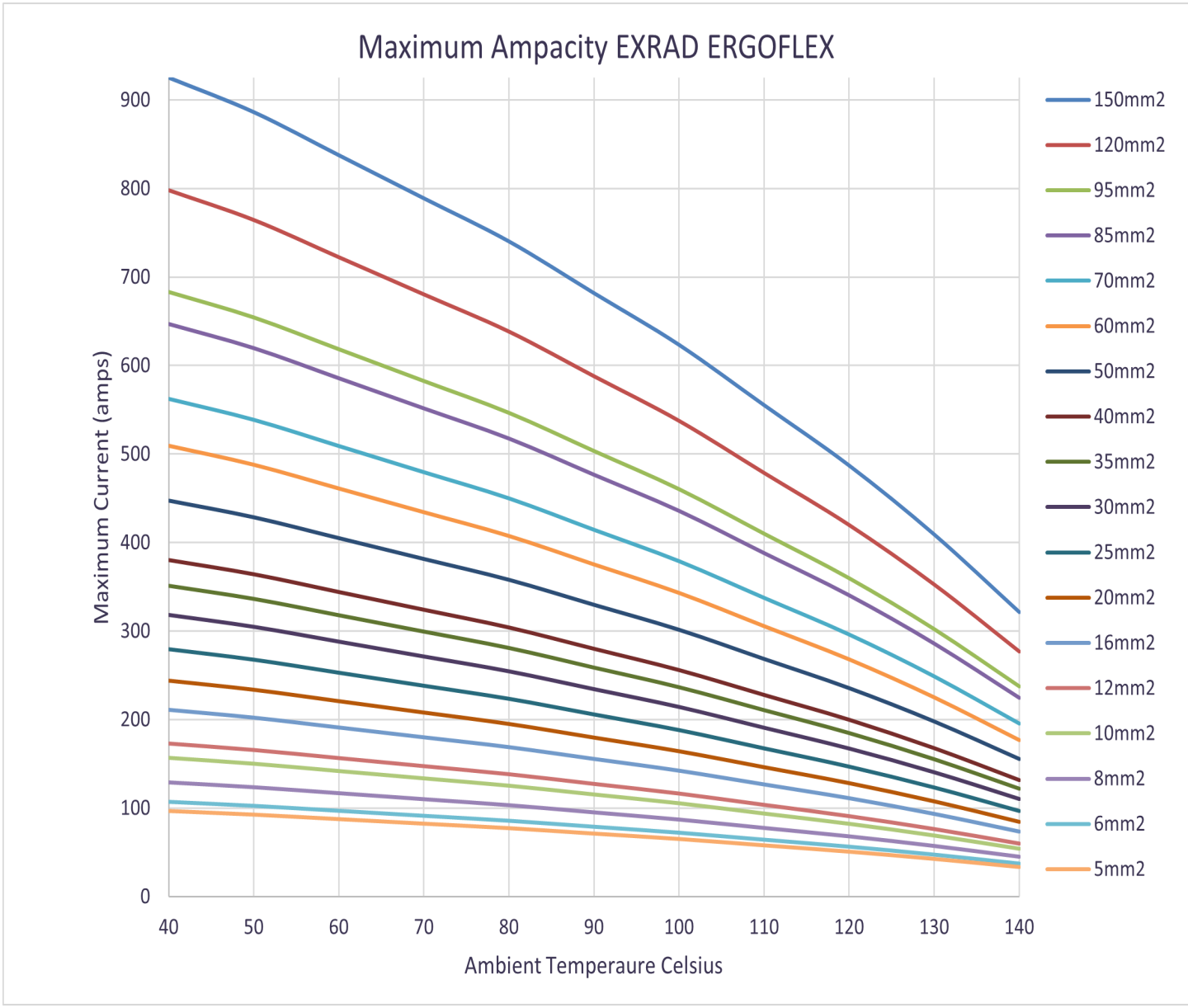

CHAMPLAIN CABLE

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ISO 19642 Section	Description	Requirement	Typical Results (35mm^2 Sample)	
5.2.1	Outside Cable Diameter	10.4mm max.	9.91mm	Pass
5.2.2	Insulation Thickness	0.64mm min.	0.99mm	Pass
5.2.3	Conductor Diameter	9.0mm max.	7.87mm	Pass
5.3.1	Conductor Resistance	0.527 mΩ/m max.	0.450 mΩ/m	Pass
5.3.3	Withstand Voltage	10kV for 5min	No dielectric breakdown	Pass
5.3.5	Insulation Faults	Spark test @ 8.0kV	No breakdown	Pass
5.3.6	Insulation Volume Resistivity	10^{12} Ω /mm min.	1.25 x 10^{15} Ω /mm	Pass
5.4.5	Flexibility Test	Customer-Defined	34.9 N	N/A
5.5.2	Long-Term Heat Aging	150℃, 3000 hrs, 3kV, no breakdown	No cracks, No breakdown	Pass
5.5.3	Short-Term Heat Aging	175℃, 240hrs, 3kV, no breakdown	No cracks, No breakdown	Pass
5.5.4	Thermal Overload	200℃, 6 hrs, 5Kv	No cracks, No breakdown	Pass
5.5.5	Pressure at High Temperature	Under load @150℃, 5kV 5min, no breakdown	No cracks, No breakdown 92% retention	Pass
5.5.6	Shrinkage by heat	2mm max. @ 150℃	0.0 mm	Pass
5.5.7	Low Temperature Winding	4 hrs @ -40℃, 3kV, no breakdown	No cracks, No breakdown	Pass
5.5.8	Cold Impact	16 hrs @ -15℃, 1kV, no breakdown	No cracks, No breakdown	Pass
5.5.9	Temperature and Humidity Cycling	40 x 8 hour cycles -40℃ to 150℃, relative humidity 80 -100%, 3kV	No cracks, No breakdown	Pass
5.5.10	Resistance to hot water	35 days in 85C water, IR not less than 10^{12} Ω/mm	4.46 x 10^{14} Ω/mm, no breakdown	Pass
5.5.11	Resistance to liquid chemicals	Groups 1 and 2, no breakdown.	All fluids: No crack/damage/breakdown	Pass
5.5.14	Ozone Resistance	65℃, 192 hours, Ozone (1+/- 0.05) x 10^{-6}	No cracks	Pass
5.5.15	Resistance to Flame Propagation	Must extinguish within 30 sec. max. and a min of 50mm unburned	4.0 sec.	Pass

Approvals: GMW 15626; Ford AU5T-1A348-AA; FCA/Stellantis MS90034 150C XLPO

MAy-25
209 R11

CHAMPLAIN CABLE

Manufacturing Locations:
Colchester, Vermont
El Paso, Texas
www.champcable.com