



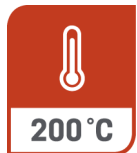
EXRAD[®] S200XL

Shielded Thin Wall

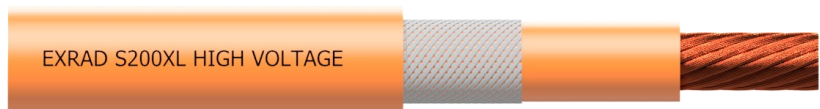
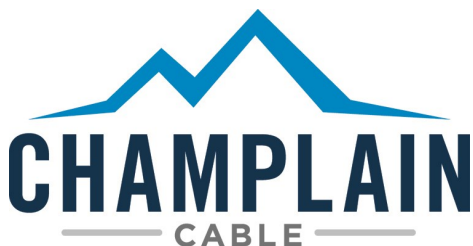
High Voltage Cable

1000VAC/1500VDC, ISO-19642-9, Class F, Thin Wall

- Revolutionary EXTRAD[®] S200XL Irradiation Crosslinked Fluoroelastomer (XLFE)
- Tougher than Silicone and EPDM
- Ultimate Flexibility, Thin, Fluid Resistant and Tough
- Performs at Higher Temperatures for Longer Periods of Time
- Ideal for High Power and Long Life Applications
- High Current Carrying Capacity



- Sizes from 3.0mm² to 150mm². Larger sizes up to 250mm² also available.
- 3,000 hours rated at 200°C
- 1000 VAC and 1500 VDC Rated
- Flexible and Standard Conductor Stranding available.
- UV Resistant
- Excellent Cut-through Resistance





EXRAD® S200XL

Shielded Thin Wall

High Voltage Cable

Preferred, ISO Flexible Conductor

Part Number	Bare Copper Conductors	Conductor Diameter mm / nom	Primary Diameter mm / nom	Shield Diameter mm / nom	Shield Coverage min	Finished Diameter mm / nom	Min Static Bend Radius mm	Finished Weight kg/KM, nom	Maximum Conductor Resistance 20°C MΩ per M
15-09013	3.0mm ² (161/.15)	2.26	3.23	3.67	85%	4.64	14	57	6.15
15-09014	4.0mm ² (224/.15)	2.74	3.56	4.00	85%	4.97	15	76	4.71
15-09015	5.0mm ² (245/.15)	2.79	4.05	4.50	85%	5.80	17	87	3.94
15-09016	6.0mm ² (182/.20)	3.20	4.15	4.59	85%	5.90	18	95	3.14
15-09017	8.0mm ² (238/.20)	3.61	4.80	5.24	85%	6.82	20	128	2.38
15-09018	10mm ² (322/.20)	4.24	5.77	6.21	85%	7.80	23	162	1.82
15-09019	12mm ² (380/.20)	4.83	6.30	6.88	85%	8.30	25	204	1.52
15-09020	16mm ² (511/.20)	5.38	6.81	7.53	85%	9.30	28	241	1.16
15-09021	20mm ² (610/.20)	6.02	7.39	7.84	85%	9.90	30	283	0.955
15-09022	25mm ² (798/.20)	6.86	8.31	8.75	85%	11.00	33	361	0.743
15-09023	30mm ² (912/.20)	7.06	9.19	9.64	85%	11.90	36	419	0.647
15-09024	35mm ² (1083/.20)	7.87	9.90	10.41	85%	12.90	39	492	0.527
15-09025	40mm ² (1235/.20)	8.48	10.52	11.06	85%	13.60	41	536	0.473
15-09026	50mm ² (1615/.20)	9.65	11.61	12.18	85%	14.90	45	663	0.368
15-09027	60mm ² (1843/.20)	10.34	12.65	13.35	85%	15.90	48	769	0.315
15-09028	70mm ² (2128/.20)	11.76	14.02	14.74	85%	17.00	51	902	0.259
15-09029	85mm ² (2660/.20)	12.95	15.24	15.96	85%	18.50	56	1,053	0.219
15-08905	95mm ² (2926/.20)	14.05	16.00	16.57	85%	19.50	58	1,149	0.196
15-09030	120mm ² (3885/.20)*	14.45	18.16	18.87	85%	21.67	65	1,606	0.153
15-09031	150mm ² (4788/.20)*	17.57	21.47	22.38	85%	25.40	76	1,919	0.120

Optional, ISO Standard Conductor

Part Number	Bare Copper Conductors	Conductor Diameter mm / nom	Primary Diameter mm / nom	Shield Diameter mm / nom	Shield Coverage min	Finished Diameter mm / nom	Min Static Bend Radius mm	Finished Weight kg/KM, nom	Maximum Conductor Resistance 20°C MΩ per M
15-09036	3.0mm ² (44/.29)	2.16	3.20	3.66	85%	4.69	14	58	6.15
15-09037	4.0mm ² (56/.30)	2.46	3.48	3.94	85%	4.85	24	67	4.71
15-09038	5.0mm ² (70/.29)	2.72	4.05	4.48	85%	5.75	29	92	3.94
15-09039	6.0mm ² (84/.30)	2.92	4.15	4.61	85%	5.90	29	100	3.14
15-09040	8.0mm ² (119/.28)	3.71	4.80	5.25	85%	6.80	34	125	2.38
15-09041	10mm ² (147/.29)	4.24	5.65	6.23	85%	7.88	39	164	1.82
15-09042	12mm ² (175/.29)	4.72	6.15	6.73	85%	8.30	42	191	1.52
15-09043	16mm ² (224/.30)	5.59	6.80	7.31	85%	9.30	47	238	1.16
15-09044	20mm ² (273/.30)	6.20	7.40	7.91	85%	9.90	50	295	0.955
15-09045	25mm ² (364/.29)	6.86	8.30	8.87	85%	11.00	55	352	0.743
15-09046	30mm ² (418/.29)	7.32	9.14	9.72	85%	11.90	60	397	0.647
15-09047	35mm ² (511/.29)	8.10	9.83	10.40	85%	12.90	65	481	0.527
15-09048	40mm ² (551/.29)	8.56	10.54	11.11	85%	13.60	68	526	0.473
15-09049	50mm ² (722/.29)	9.91	11.60	12.17	85%	14.90	75	669	0.368
15-09050	60mm ² (836/.29)	10.44	12.62	13.20	85%	15.90	80	761	0.315
15-09051	70mm ² (1026/.29)	11.53	13.67	14.37	85%	17.01	85	903	0.259
15-09052	85mm ² (1197/.29)	12.24	15.09	15.81	85%	18.60	93	1,077	0.219
15-09053	95mm ² (1330/.29)	13.23	15.98	16.70	85%	19.50	98	1,186	0.196
15-09054	120mm ² (1729/.29)*	14.86	18.42	19.14	85%	21.93	110	1,679	0.153
15-09055	150mm ² (2147/.29)*	16.54	20.50	21.41	85%	24.46	122	1,889	0.120

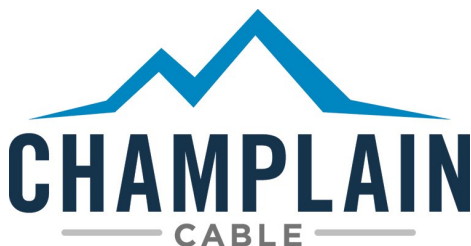
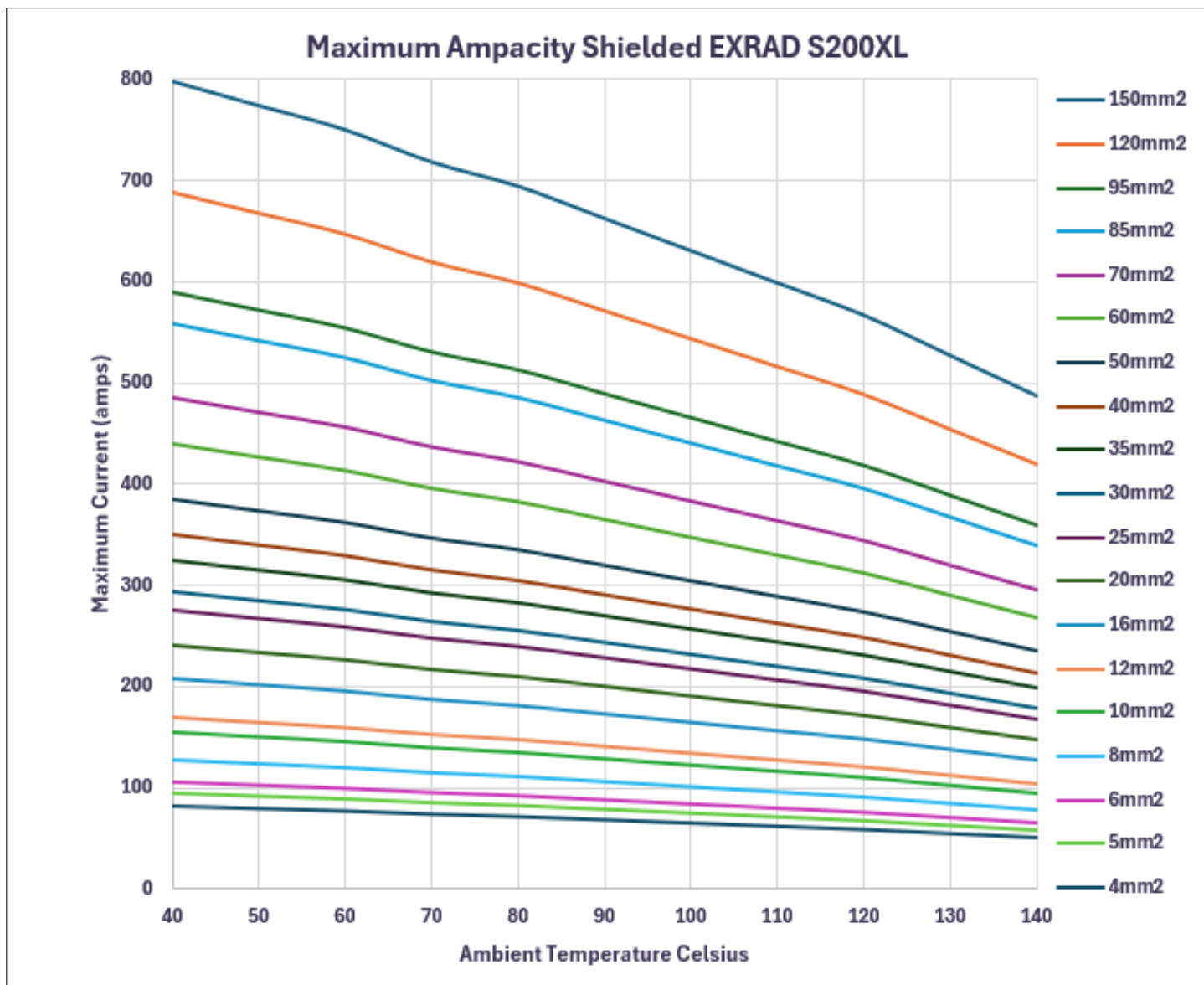
* 120mm² and 150mm² are not currently ISO-19642-9 thin wall sizes



EXRAD[®] S200XL

Shielded Thin Wall

High Voltage Cable



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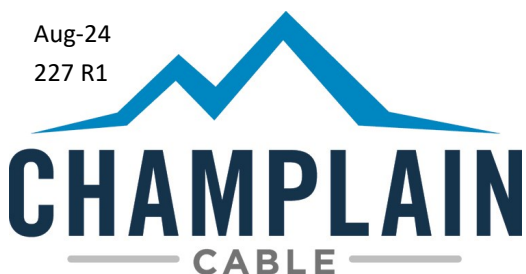
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ISO 19642 Section	Description	Requirement	Typical Results (35mm ² Sample)	
5.2.1	Outside Cable Diameter	10.4mm max.	9.91mm	Pass
5.2.2	Insulation Thickness	0.64mm min.	0.99mm	Pass
5.2.3	Conductor Diameter	9.0mm max.	7.87mm	Pass
5.3.1	Conductor Resistance	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	Sparktest @ 8.0kV	No breakdown	Pass
5.3.6	Insulation Volume Resistivity	10 ¹² Ω /mm min.	1.25 x 10 ¹⁴ Ω /mm	Pass
5.4.5	Flexibility Test	Customer-Defined	34.9 N	NA
5.5.2	Long-Term Heat Aging	200°C, 3000 hrs, 3kV, no breakdown	No cracks, No breakdown	Pass
5.5.3	Short-Term Heat Aging	225°C, 240hrs, 3kV, no breakdown	No cracks, No breakdown	Pass
5.5.4	Thermal Overload	200°C, 6 hrs, 5Kv	No cracks, No breakdown	Pass
5.5.5	Pressure at High Temperature	Under load @150°C, 5kV 5min, no breakdown	No cracks, No breakdown 92% retention	Pass
5.5.6	Shrinkage by heat	2mm max. @ 150°C	0.0 mm	Pass
5.5.7	Low Temperature Winding	4 hrs @ -40°C, 3kV, no breakdown	No cracks, No breakdown	Pass
5.5.8	Cold Impact	16 hrs @ -15°C, 1kV, no breakdown	No cracks, No breakdown	Pass
5.5.9	Temperature and Humidity Cycling	40 x 8 hour cycles -40°C to 150°C, 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	4.46 x 10 ¹² 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°C, 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

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