

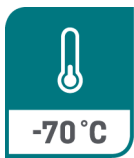
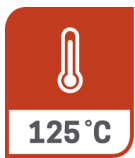


EXRAD ERGOFLEX™

Thin Wall High-Flex Door Wire

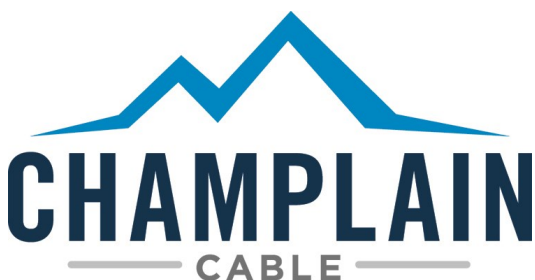
60V, 125°C, ISO 19642-3, Class C

- Highly Engineered EXRAD ERGOFLEX™ Irradiation Crosslinked Polyolefin (XLPO)
- Performs at Low Temperatures When Other Products Crack and Fail
- Designed Specifically for High-Flex Door and Hatch Applications
- Long Flex Life and Abrasion Resistance for Today's Longer Warranties
- Standard Connectors Match and Seal Well
- Excellent Column Strength for Seal Insertion



Product Number	Standard Bare Copper Conductors ⁽¹⁾	Conductor Diameter (nom)		Insulation Thickness (nom)		Nom. OD		Bend Radius Non. Flex (min)		Finished Weight (nom) (kg/KM)	Conductor Resistance Ω per KM (max)
		mm	in	mm	in	mm	in	mm	in		
EXRAD-EF125-0.35	0.35mm ² (37/.11)	0.79	.031	0.26	.010	1.30	.051	4	.20	0.7	54.4
EXRAD-EF125-0.50	0.50mm ² (41/.13)	0.89	.035	0.28	.011	1.50	.059	5	.24	0.7	37.1
EXRAD-EF125-0.75	0.75mm ² (41/.16)	1.19	.047	0.31	.012	1.80	.071	7	.28	0.9	24.7
EXRAD-EF125-1.00	1.00mm ² (61/.14)	1.24	.049	0.38	.015	2.00	.079	8	.32	1.1	18.5
EXRAD-EF125-1.50	1.50mm ² (84/.15)	1.55	.061	0.38	.015	2.30	.091	9	.36	1.6	12.7
EXRAD-EF125-2.0	2.00mm ² (105/.16)	1.85	.071	0.40	.016	2.65	.104	11	.41	2.2	9.42
EXRAD-EF125-2.5	2.50mm ² (140/.16)	2.13	.084	0.36	.014	2.85	.112	11	.45	2.6	7.60
EXRAD-EF125-3.0	3.00mm ² (161/.152)	2.26	.089	0.46	.018	3.20	.126	13	.51	3.3	6.15
EXRAD-EF125-4.0	4.00mm ² (224/.16)	2.80	.110	0.40	.016	3.60	.142	14	.57	4.1	4.71

1). Conductors designed specifically for high-flex applications. May deviate slightly from ISO 19642-3





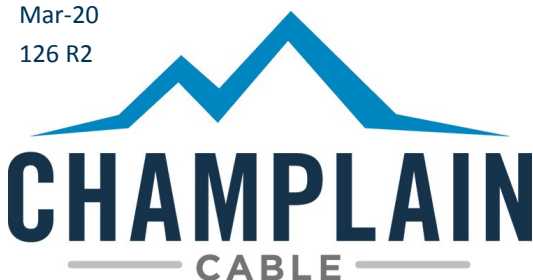
EXRAD ERGO FLEX™

Thin Wall High-Flex Door Wire

ISO 19642 Section	Description	Requirement	Typical Results (0.35mm ² Sample)	
4.1.1	Outside Wire Diameter	1.40mm max.	1.34mm	Pass
4.1.2	Insulation Thickness	0.20mm min.	0.27mm	Pass
4.1.3	Conductor Diameter	0.90mm max.	0.76mm	Pass
4.2.1	Conductor Resistance	54.4 mΩ/m max.	46.7 mΩ/m	Pass
4.2.2	Withstand Voltage	1kV for 30min // 5kV for 5min.	No dielectric breakdown	Pass
4.2.4	Insulation Faults	Sparktest @ 3.0kV	No breakdown	Pass
4.2.5	Insulation Volume Resistivity	10 ⁹ Ω /mm min.	1.21 x 10 ¹⁵ Ω /mm	Pass
5.3.5	Flexibility Test	Customer-Defined	34.9 N	NA
5.4.2	Long-Term Heat Aging	150°C, 3000 hrs, 3kV, no breakdown	No cracks, No breakdown	Pass
5.4.3	Short-Term Heat Aging	175°C, 240hrs, 3kV, no breakdown	No cracks, No breakdown	Pass
5.4.4	Thermal Overload	200°C, 6 hrs, 5Kv	No cracks, No breakdown	Pass
5.4.5	Pressure at High Temperature	Under load @150°C, 5kV 5min, no breakdown	No cracks, No breakdown	Pass
5.4.6	Shrinkage by heat	2mm max. @ 150°C	0.0 mm	Pass
5.4.7	Low Temperature Winding	4 hrs @ -40°C, 3kV, no breakdown	No cracks, No breakdown	Pass
5.4.8	Cold Impact	16 hrs @ -15°C, 1kV, no breakdown	No cracks, No breakdown	Pass
5.4.9	Temperature and Humidity Cycling	40 x 8 hour cycles -40°C to 150°C, relative humidity 80 -100%, 3kV	No cracks, No breakdown	Pass
5.4.10	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
5.4.11	Resistance to liquid chemicals	Groups 1 and 2, no breakdown.	All fluids: No crack/damage/breakdown	Pass
5.4.14	Ozone Resistance	65°C, 192 hours, Ozone (1+/- 0.05) x 10 ⁻⁶	No cracks	Pass
5.4.15	Resistance to Flame Propagation	Must extinguish within 30 sec. max. and a min of 50mm unburned	4.0 sec.	Pass

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