

## **EXAR® Cathodic Protection Cable**

For Cathodic Protection Applications



Photograph by courtesy of Titanium Electrode Products, Inc.

### ***Application***

For deepwell anode groundbeds and anode installations in areas where degradation due to aggressive chemicals can occur. For protection from corrosive environments caused from hydrogen sulfides, sulfates, hydrochloric acids, chlorine and others, EXAR® cathodic protection cable is the ideal choice. An insulating system that includes an irradiation cross-linked PVDF layer with an HMWPE jacket substantially improves the durability and impermeability of the cable. The remarkable properties of this cable, high resistance to chemical attack, electrolytic and abrasive actions, make it the preferred medium for cathodic protection.

### ***Manufacturer***

Champlain Cable Corporation has specialized in irradiation cross-linked processing and polymer materials technology since 1970. An ISO 9001 and QS 9000 registered company, Champlain Cable maintains the highest quality in design, development, and manufacturing of high performance wire and cable. Champlain's state-of-the-art manufacturing facility produces specialty wire and cable suitable for a variety of extreme environments and challenging electrical requirements.



Subsidiary of HUBER + SUHNER (North America) CORP

### **Construction**

Conductor: Stranded tinned copper conforming to ASTM B3 and B8 and / or IEC 228 class 2.  
Available in both Metric and AWG sizes

Insulation: Irradiation cross linked Kynar® (PVDF)  
Minimum Wall: .020 inches (0.50mm) Minimum Concentricity: 90%

Jacket: High molecular weight polyethylene (HMWPE)  
Density > 0.941g/cm<sup>3</sup>, conforming to ASTM D1248, Type 3, Class C, Category 5  
Minimum Wall: .065 inches (1.63mm) Minimum Concentricity: 90%

Print: "CHAMPLAIN EXAR CATHODIC – X AWG"

Nominal Area of Conductors (mm <sup>2</sup> )	6	10	16	25	35
Similar AWG Size	10	8	6	4	2
No. of Strands	7	7	7 or 19	7 or 19	19
Nominal Cable Weight (kg/km)	89	122	173	255	380
Nominal Cable Weight (lbs/mft)	60	82	116	171	255
Nominal Overall Diameter (mm)	7.29	8.10	9.02	10.31	11.89
Nominal Overall Diameter (inches)	.287	.319	.355	.406	.468

### **Technical Data**

Characteristics	Performance	Test Method
Tensile	6900 psi avg. / 6500 psi min	ASTM D638
Elongation	300% avg. / 265% min	ASTM D638
Hot Modulus	66 psi	100% Elongation, 200°C
Dynamic Cut-Through	428 lbs.	6V, 0.5 ft./min., .05 mil blade
Abrasion Resistance	806 inches to failure	150 sandpaper, 4.25# load
Notch Propagation	Pass 0.5 – 2 inches	20 mil notch
Flexural Strength*	> 8600psi	ASTM D790

\*The flexural strength of PVDF compound is measured according to ASTM D790 on 2.63 mm press plaque samples. The effect of irradiation increases flexural strength.

While every care has been taken, data quoted on this leaflet is believed to be correct at the time of closing for press. No claims based on data, statements, descriptions or illustrations from this leaflet will be entertained.

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