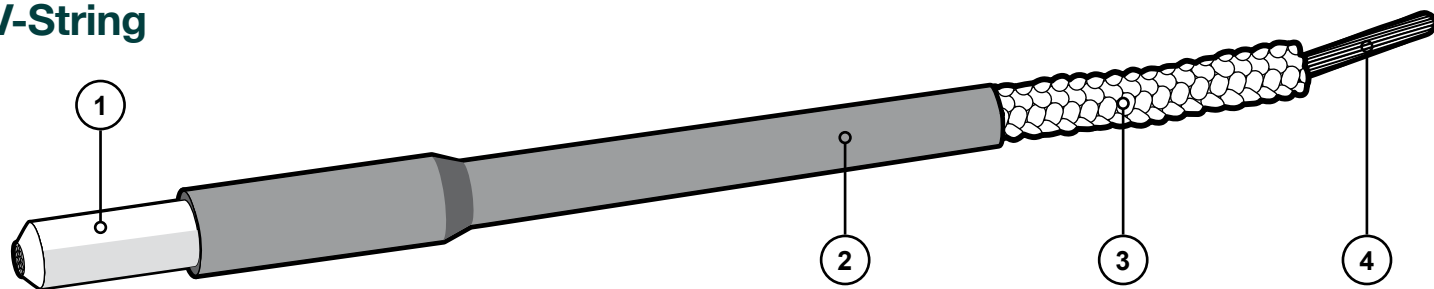


V-String



General

The Polatrak V-String electrode is a low-cost zinc reference electrode designed for offshore platform and pipeline monitoring. It is suitable as either a general-purpose cathodic-protection monitoring retrofit system or as a supplement to other Polatrak monitoring instruments, such as the DR-2 dual reference cell or the MA-1 monitored sacrificial anode. The V-String's accuracy is +/- 0.02 V.

The electrode wire consists of a galvanized-steel

aircraft cord with a PVC jacket and an overbraid of polyester fibers. V-Strings have been installed on dozens of types of structures, from platforms and offshore pipelines to shallow-water wind farms.

The ultra-flexible cord coupled with the dynamic polyester overbraid offers superior abrasion resistance and toughness while allowing precision point monitoring. The unique self-bleeding electrode design provides excellent potential stability.

Interrogating the electrode can be done in several ways. If installed on a traditional structure, the conductor can be wired to the surface and connected to a monitoring panel. In some instances, the panel can also be wired to a satellite transmitter. For subsea assets and offshore pipelines, the V-String can be interrogated by ROV using the SunStation subsea readout.

Zinc electrode (Item 1)

The zinc electrode is cast directly onto the steel conductor wire.

	Length (Inches)	Diameter (Inches)	Weight (lbs)	Life (Years)
V-20	4 [101.6 mm]	0.75 [19 mm]	0.50 [0.23 kg]	20
V-25	4 [101.6 mm]	0.85 [21.6 mm]	0.65 [0.29 kg]	25
V-30	4 [101.6 mm]	0.95 [24.1 mm]	0.81 [0.37 kg]	30
V-35	4 [101.6 mm]	1.0 [25.4 mm]	0.90 [0.41 kg]	35
V-40	4 [101.6 mm]	1.1 [28 mm]	1.08 [0.49 kg]	40

Electrode composition (MIL-A-18000-K)

Element	Weight %
Fe	0.005 max.
Pb	0.006 max.
Cu	0.005 max.
Al	0.1 - 0.5
Cd	0.025 - 0.070
Zn	Balance

Electrode potential vs. Ag/AgCl-sw (-)1.050 v

Polyshrink (Item 2)

Description High-density heat-shrinkable cross-linked polyolefin

Polyester-fiber overbraid (Item 3)

Description

The electrode wire is sheathed in a PVC jacket and has an overbraid of polyester fibers braided at 4.9 picks per inch coverage.

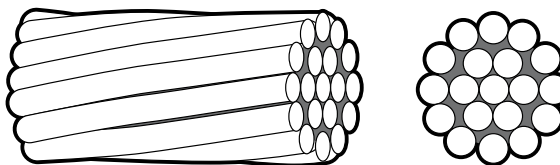
Material

18,000 denier type 77 dacron

Conductor cable (Item 4)

Description

Galvanized steel aircraft cord that is a flexible strand of nineteen wires.



Material

Galvanized steel

Diameter

1/8 inch [Ø 3.175 mm]

Lbs per 1,000 ft.

35 [15.88 kg]

Breaking strength (lbs)

2,100 [952.5 kg]

MIL SPEC

MIL-DTL-83420