

Silicone cable 矽膠電纜

Silicone wire and cable is an excellent choice for high temperature, high voltage, low corona, and applications requiring extremely flexible wire or cable. Silicone is used in implantable and medical grade wire and cable applications. It is also used in aerospace and space applications. Calmont Wire & Cable has a space-rated silicone-rubber material that will meet the current NASA out-gassing requirements without post baking.

有機矽電線和電纜是高溫，高壓，低電暈以及需要極其柔軟的電線或電纜的應用的理想選擇。有機矽用於植入和醫療級電線和電纜應用。它還用於航空航天和太空應用。Calmont Wire & Cable 採用太空級矽橡膠材料，無需後烘烤即可滿足當前 NASA 的排氣要求。

Flexibility 靈活性

One of the obvious benefits for wire and cable is the flexibility. The combination of silicone-rubber and the ultra and fine wire stranding of copper and copper alloys yields the most flexible wire construction – as limp as a piece of string. This type of wire is ideal with applications where routing a wire through a tight space is required such as, box builds, equipment, or handheld devices and has excellent weather-ability.

電線和電纜的一個明顯優勢是靈活性。矽橡膠和銅和銅合金的超細和細線絞合的組合產生了最靈活的線材結構 - 如同一根線一樣柔軟。這種類型的電線非常適用於需要在狹窄的空間內佈線的應用，例如箱式構建，設備或手持設備，並具有出色的耐候性。

Abrasion Resistance 耐磨性

The downside to silicone is it's abrasion resistance, which is fair. Depending on the application this may have no impact, best uses are static installations or when the wire or cable is not subject to contact with sharp objects. Formulations are available to increase abrasion resistance. 矽膠的缺點是它的耐磨性，這是公平的。根據應用可能沒有影響，最好的用途是靜態安裝或當電線或電纜不接觸尖銳物體時。配方可用於增加耐磨性。

Temperature 溫度

The standard temperature range is -60°C to 200°C. In most applications, it may be heated from 180 to 200°C for a year, and is also very flexible at extreme low temperatures (stiffening temperature of approximately -115°C). The operating temperature range in any application is dependent on many variables, including but not limited to: temperature, time of exposure, type of atmosphere, exposure of the material's surface to the atmosphere, and mechanical stress. In addition, a material's physical properties will vary at both the high and low end of the operating temperature range. Silicone formula is available for temperatures of 350°C with the use of a nickel conductor.

標準溫度範圍為-60°C 至200°C。在大多數應用中，它可以在180至200°C 的溫度下加熱一年，並且在極端低溫下（加熱溫度約為-115°C）也非常靈活。任何應用中的工作溫度範圍取決於許多變量，包括但不限於：溫度，暴露時間，大氣類型，材料表面暴露於大氣和機械應力。此外，材料的物理特性在工作溫度範圍的高端和低端都會有所不同。有機矽配方可在350°C 的溫度下使用鎳導體。

Chemical Resistance 耐化學性

Silicone wire has very good chemical resistance properties. Silicone cables are commonly used in applications where the cable can be in contact with chemicals. The automotive, industrial, and automation industries frequently demand chemical resistance.

矽樹脂線具有非常好的耐化學性。有機矽電纜通常用於電纜可能與化學品接觸的應用中。汽車，工業和自動化行業經常需要耐化學性。

High Voltage 高電壓

Silicone-Rubber has excellent High-Voltage ratings and is often used for High-Voltage, flexible wires. Co-extruded wire, multi-layered silicone cables with a semi-conductive layer is also available for low corona extinction voltage requirements. Silicone-rubber insulated wires and cables are the most flexible constructions offered by Calmont.

矽橡膠具有優異的高壓額定值，通常用於高壓，柔性電線。具有半導體層的共擠線，多層矽樹脂電纜也可用於低電暈消光電壓要求。矽橡膠絕緣電線和電纜是 Calmont 提供的最靈活的結構。

SiliFlex

SiliFlex is distinguished by its extreme limpness and flexibility. It is the most limber of all the high flex products offered by Calmont. SiliFlex rubber insulation compounds are inherently soft and pliable and resist the plastic flow that characterizes many insulation systems. These compounds can be tailored to meet a variety of demands such as extreme high and low temperature requirements, flame resistance, flexibility, radiation resistance, strength and purity. SiliFlex is used extensively for robotic, aerospace and medical applications.

SiliFlex 以其極度的柔軟性和靈活性而著稱。它是 Calmont 提供的所有高柔性產品中最柔軟的。SiliFlex 橡膠絕緣化合物具有固有的柔軟性和柔韌性，可抵抗許多絕緣系統的塑性流動。這些化合物可以定制，以滿足各種要求，如極高和低溫要求，阻燃性，柔韌性，抗輻射性，強度和純度。SiliFlex 廣泛用於機器人，航空航天和醫療應用。

