



# ARMORED CORDSETS

## HARSH, RUGGED ENVIRONMENTS

Mencom's new line of armored, quick disconnect cordsets provides a rugged solution for harsh environments.



**Available in:** 7/8" MINI, M12 Micro-DC & M12 Ethernet D-Code, 1/2" Micro AC and M8 Pico Connectors

Please contact us for custom cordset solutions



*Stainless Steel Coupling Nut*

*Stainless Steel Armor Jacket*

*Silicone Tube Covered Jacket*

*Thermoplastic Elastomer Jacket*

*PVC Covered Stainless Steel Jacket*

## WHY DO I NEED THIS PRODUCT?

- To extend the life of existing assemblies in potentially destructive environments
- Connectorize to make faster installation and future repairs

## HOW ARE THESE PRODUCTS BETTER?



### Stainless Steel Coupling Nut

Corrosion resistant



### Stainless Steel Armor Jacket

Crush, abrasion resistant



### Silicone Tube Covered Jacket

Extreme weld slag and high temperature protection



### Thermoplastic Elastomer Jacket

Weld slag resistant



### PVC Covered Stainless Steel Jacket

Water tight, crush and abrasion resistant

## WHERE DO I USE THESE PRODUCTS?

### CONNECTIVITY SOLUTIONS FOR HARSH & RUGGED ENVIRONMENTS



Chemicals, Abrasions, High Temperature, Water, Pressure, Welding, Cutting, Marine applications, and beyond create some of the harshest environments for cables. When you are faced with the ex-treme, but still need the convenience of plug and play connectivity look no further than Mencom. We have solutions for those problem environments to keep your equipment running longer and saving you on costly down time.

# ARMORED CABLE SPECS



## **Stainless Steel Coupling Nut**

Corrosion resistant

- 316 Stainless Steel = 0.08% carbon
- As opposed to 316L, which is 0.03% or less
- The higher the carbon content, the harder the steel
- Max temp - 1800°F
- 316 is Austenitic (cannot be hardened by heat treatment), non-magnetic, highly stain resistant
- Resistant to most Alcohols, Sodium & Calcium brines, hypochlorite solutions (i.e., Sodium Hypochlorite-bleach, or Calcium hypochlorite, pool 'chlorine'), phosphoric acid, sulfites and sulfurous acids. Due to presence of molybdenum, 316 is resistant to pitting caused by chlorides common in 304 alloys.
- Susceptible to Aluminum Fluoride, Bromine, etching chlorides, Phosphoric Acid (>40%), Silver Bromide, Sodium Fluoride, Sodium Hypochlorite (100%), Sodium Sulfide, Sulfur Chloride, Sulfuric Acid (>10%), and Tin Salts

316 Stainless Steel is more resistant to both corrosion and oxidation than the 304 varieties of alloys. The HEX shape ensures that particles will not stick to the knurl during cleaning and make this coupling nut ideal for USDA inspectable facilities where potential caustic materials and high pressure wash downs are likely.



## **Stainless Steel Armor Jacket**

Crush, abrasion resistant

- MDC = 0.250" ID/ 0.345" OD
- Approx. 0.110 LBS/ft
- MIN = 0.500 ID / 0.600 OD
- Approx. 0.180 LBS/ft
- 304 Stainless Steel - 0.08% carbon, often referred to as 18-8 due to the minimum requirement of 18% Chromium-8% Nickel
- 304 is Austenitic (cannot be hardened by heat treatment), non-magnetic, highly stain resistant • Max temp - 1800°F
- Resistant to sterilizing solution, most organic chemicals, and a wide variety of inorganic chemicals
- Susceptible to pitting from chlorides, Susceptible to Aluminum Fluoride, Bromine, etching chlorides, Phosphoric Acid (>40%), Silver Bromide, Sodium Fluoride, Sodium Hypochlorite (100%), Sodium Sulfide, Sulfur Chloride, Sulfuric Acid (>10%), and Tin Salts

304 Stainless Steel is the most common of the Stainless Steel family. The chromium-nickel content and low carbon content create a highly durable alloy resistant to oxidation and corrosion. Found in almost every industry where ease of cleaning and the prevention of product contamination are paramount, the Stainless Steel Armor Jacket also provides an abrasion resistance unattainable in the thermo-plastic materials.

# ARMORED CABLE SPECS



## **Silicone Tube Covered Jacket**

Extreme weld slag and high temperature protection

- Consistent with FDA Regulations for Food Contact
- Does not support microbial growth
- Animal Fat and Chemical Resistant
- Resistant to organic solvents, strong acids, strong alkalis, UV, sea water, oxygen, and ozone
- Susceptible to oxidation at temperatures beyond the cable capacity (500°C), and shows thermal stability (maintains properties over a wide range of operating temperatures, -100 °C to 250 °C)
- Susceptible to Acetone, hydrocarbons, asphalt, Benzene, many chlorine compounds, freons, gasoline, ethyls, lubricants, ketones, naphtha, propane, turpentine, xylene

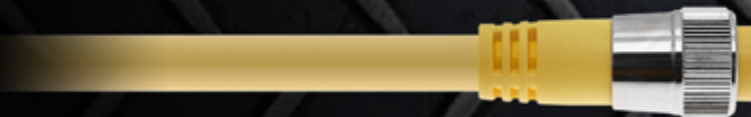


## **PVC Covered Stainless Steel Jacket**

Water tight, crush and abrasion resistant

- Same specs for Stainless Steel tubing

The PVC coated Stainless Steel offers all the benefits of the Stainless Steel jacketed cables with added ingress protection provided by a full PVC wrap.



## **Thermoplastic Elastomer Jacket**

Weld slag resistant

- Thermoplastic elastomer (can be re-melted and re-formed) with physical properties and performance of a thermoset (cured, or vulcanized) rubber.
- Service range is typically -50°C to 170°C • RoHS Compliant
- Resistance to Chlorines, Caustic Soda, Diesel Fuel, Glycerin, Glycol, Hydrogen Peroxide, Naphtha, Bleach, & Sea Water.
- Susceptible to Acetone, Benzene, Ether, Ethanol, Formic Acid, Freon, Isopropyl Alcohol, Nitric Acid, MEK, Phosphoric Acid, & Xylene.

Due to its chemical and abrasion resistance, TPE is an easy choice for potentially harsh environments requiring sanitation and wash-down procedures. TPE offers the flexibility of expensive thermoset materials making it suitable for a variety of applications from Automotive to Welding.