

## Capabilities Bulletin

### CB 0021

## Continuous Aluminum Armor

Robust protection from crushing and impact, fluid ingress, MC (metal clad) rated and suitable for hazardous locations as appropriate.

Belden's Continuous Aluminum Armor offers crush and impact protection as well as protection from chemicals and water with ease of installation compared to conduit.



#### **Features & Benefits**

- Excellent crush and impact protection
- Superior fluid ingress protection
- Suitable for hazardous locations as appropriate upon request
- Ease of installation vs conduit

Cable failure in industrial applications can cost thousands of dollars per minute. Plant and facility designers in fields such as oil & gas, petrochemical, and pulp & paper need cabling with robust protection from impact or crushing, as well as environmental protection. Impervious to fluid ingress and suitable for installation in harsh and hazardous locations, such as Class I, Division 1 as appropriate, Belden's Continuous Aluminum Armor ensures that installation requirements will be met.

Belden's Continuous Aluminum Armor eliminates the need for conduit, and is easier to install and re-route, reducing both the physical cost and the labor cost of installation. Belden's Continuous Aluminum Armor can be ordered for any of the company's standard or special cable constructions, including, instrumentation, control, VFD, and industrial communication & networking products. Installers benefit from being able to provide appropriately rated cable for a wide variety of challenging applications.

Belden has a number of standard cables available with Continuous Aluminum Armor including:

- FOUNDATION Fieldbus/PROFIBUS PA (183076F)
- PROFIBUS DP (183079A)
- ControlNet® Quad Shielded Coax (183092A)
- Blue Hose<sup>®</sup> Cable (189463)



## **Belden Continuous Aluminum Armor**

#### **Types of Belden Armor Available**

Belden offers three types of MC armor used for cables: aluminum interlocked armor, galvanized steel interlocked armor and continuously corrugated aluminum armor.

Continuous armored cable provides ingress protection from liquids as well as crush and impact protection. It is designed to be used in extreme environments where exposure to chemicals and/or moisture could shorten cable life.

Continuous aluminum armor is applied as a continuous strip of aluminum, which is

wrapped around the cable and welded at the seam for impenetrability. Corrugation permits bending without kinking.

Interlocked armor provides excellent crush and impact protection as well, along with the advantage of greater flexibility during installation and equipment moves.

Belden also offers Belclad® corrugated aluminum or steel tape, which is sealed to prevent fluid ingress (i.e., chemicals, water and other fluids) into the cable core. Belclad provides enhanced mechanical protection, but is not MC rated.

# Ordering Belden Armor and Belclad products.

The Belden part numbering system makes it easy to specify an armor type. Customers use the prefix system in the table below to specify the type of armor to be used and the jacket over the armor. For example, if a customer wants to purchase Belden product 3076F with continuous corrugated aluminum armor with overall PVC jacket, the finished part number would be 183076F. (The prefix 8 designates continuous armor and the prefix 1 designates PVC jacket.)



