



**Winchester**  
Interconnect

Marine, Oil & Gas Solutions



*We Energize Innovation™*

## CN Series



Cadillac-Win's™ threaded CN Series has been designed to meet or exceed the electrical performance requirements of Mil-C-5015. This family of connectors is intermateable and interchangeable with other connector brands available in the market.

The connector series has been designed for reliable, heavy-duty, environmental usage and is currently used in many types of market applications, including process and control, marine, oil and gas, machine tool, industrial, power distribution systems and transportation. The performance of this connector series in the Oil & Gas marketplace is noteworthy, providing reliable, ruggedized service for power distribution and various oil rig configurations.

### Benefits/Features

- UL & CSA Certification (consult our web site for latest product certifications)
- Connector designs offered in crimp, solder and pressure terminals based on insert arrangement
- All hardware is machined using 6061T aluminum bar stock
- Quick coupling, double-lead thread resists cross-mating problems and provides positive mating
- Natural hardcoat plating provides a durable and scratch resistant finish. Black hardcoat plating is available, consult the factory
- Silver plated contacts (standard)

## EP (Explosion Proof) Series



The EP Series is ATEX/IECEX certified for use in hazardous environments. Classified facilities such as petrochemical refineries, land and offshore drilling systems are just a few of the applications for this product series.

### Benefits/Features

- Hazardous area, environmental connector rated IP68
- For use in a zone 1–IIC environment
- Ex d IIA, IIB, IIC–T6, flame and dust proof
- Ratings, Ex d, and Ex de for panel mounting (IECEX Rating: Ex d or de IIC T6 Gb)
- Globally recognized for use in explosive atmospheres
- Designed for the roughest industrial applications
- Large coupling sleeve, secured with captive set screws
- Strong machined aluminum construction
- Secure single lead threaded coupling system
- Durable, Scratch resistant black Hardcoat Plating
- Vast family of reversible inserts, for power, signal and mixed applications
- From 1 to 68 contact positions
- Contact sizes for 18, 16, 12, 10, 8, 4, 1/0, 4/0, 313 to 777 MCM AWG
- Shell sizes 6, 8, 10, 12, 14. Consult factory for other shell sizes
- Extensive array of hardware & strain relief options
- Custom cable assembly manufacture to support customer application specific designs
- Silver or gold contacts are available.
- Stainless steel and brass components are available upon request.

Category	Category Description	Zone Gas (G)	Zone Dust (D)
2	Flammable Material Present Intermittently	1	21
3	Flammable Material Present Abnormally	2	22

## CVB-EX MIL-C-5015



The reverse bayonet connectors are derived from the threaded Mil-C-5015 series to provide faster coupling and anti-vibration resistance.

In this series the coupling system is composed of three bayonet ramps machined on the external side of the receptacle connector and three stainless steel studs mounted inside the plug connector's coupling nut.

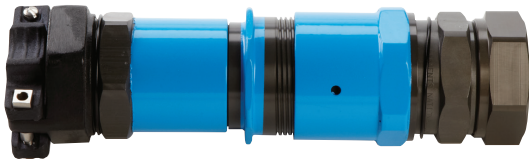
### Advantages

- Fast coupling and uncoupling
- Security of coupling is guaranteed and consequently improved reliability
- Higher number of mating cycles

### Specifications

<i>Working Temperature:</i>	-40°C / +135°C
<i>Protection degree:</i>	IP66/IP67 according to EN 60529
<i>Shell material:</i>	Hard anodized aluminium alloy or nickel plated brass
<i>Safety lock:</i>	Stainless steel hexagon socket screw
<i>Available arrangements:</i>	Wide range according to Mil-C-5015
<i>Shell sizes:</i>	from 16S to 40
<i>Contacts quantity:</i>	from 2 to 150
<i>Contacts termination:</i>	Crimp

## Single Pole Series



The single pole, high amperage connectors accommodate cable sizes ranging from 4/0 AWG to 777 MCM cables. Contacts are available in crimp, pressure or bus bar termination. The single pole connector series provides a proven, secured locking coupling system an accessible, replaceable contact system that rivals other similar power connectors.

The Single Pole product line series is 100% interchangeable with well-known brands, as well as custom contact designs. These connectors can be ordered in 10 colors in the CN version to meet international phase requirements.

This series is available as explosion proof connectors for hazardous location protection (EP) and general environment usage (CN). All Single Pole connectors are UL & CSA certified and meet IP 68 requirements.

### Benefits/Features

- Designed for up to 1,000 volts (AC or DC) and up to 1,135 amps of continuous power
- Silver-plated, high conductive copper alloy contacts
- Available in 10 colors for easy phase identification compliant to international safety code standards
- Compatible with Type P drilling cables and accommodates cable sizes from 4/0 AWG to 777 MCM
- Protected male and female contact "dead front" for increased safety
- Temperature rating: -40 to 125°C
- Environmental rating: IP 68
- Intertek ITSo8ATEX15968X - 94/9/EX (ATEX) directive (EP line and contacts)
- UL, CSA & CE certification
- Intermateable and interchangeable with most competitor brands

## Rotatable Connectors



Key design features and thorough testing ensure dependable rotatable connectors that withstand high temperatures (400°F) as used in the toughest and deepest drilling operations.

### Speedy Production Schedules

With our streamlined in-house manufacturing and engineers specializing in rotatable connectors, we provide rapid turnaround, usually twice as fast as our competitors. In-stock rotatable connectors requiring minor modifications can be delivered to you within 2 to 4 weeks. Custom-manufactured rotary connectors are frequently delivered in 10 weeks.

### Customizable Solutions

Winchester specializes in state-of-the-art rotatable connector solutions. Our engineers will work closely with you to accurately and expeditiously design to your requirements. Integrated design features such as high pressure bulk heads or retaining mechanisms as part of a complete design solution are customized to your needs. In-house manufacturing ensures quick turnaround of your total project. We can do small or large production runs with short lead times.

### Rotary Mini Connectors

Winchester also offers Rotary Mini connectors for applications where space is at a premium.

### Design Parameters

#### **Pressure Rating**

Up to 20,000 psi (1378 BAR)

#### **Shell Material**

Consult Connector Series

#### **Current**

2 AMPS Max per Contact

#### **Temperature Range**

Up to 200°C / 400°F

#### **Insulation**

#### **Resistance**

1 GOhms Min @ 500VDC

#### **Leakage Rate**

10<sup>-9</sup> mbar x 1 x s<sup>-1</sup>

## Cable Assembly and Components



### Cable Assembly

- Winchester's portfolio of heavy duty cable assemblies and cable reels are suited to perform in extreme operating conditions providing greater resistance to damage and wear...reducing expensive field failures.
- In-house processing techniques ensure the best seal between the encapsulation and the wire jacket thereby creating a watertight seal.
- Several configurations available including circular MIL spec connectors, Y- assemblies, custom connector over-molds or terminations. Cable lengths and conductors are customized to customer specifications.
- Competitive lead times and pricing

### Molded Connectors, Boot Seals and Snubbers

- High pressure high temperature custom molded connectors that serve aggressive down-hole environments.
- Glass Reinforced Epoxy (GRE) material and unique processing methods enable our connectors to operate at high pressures and temperature applications.
- Tested to 20,000 psi and 400°F
- Offerings include multipin connectors in different configurations and Kintec/KTK style molded connectors.

### Machined Components – Tuning and Milling Capabilities

- CNC Turning (12 Lathes)
- 4 3/4" max diameter with max length 30"
- CNC Milling (3 Mills)
- (1) 42" X 20" Table size with a Z axis of 22"
- (2) 36" X 18" Table size with a Z axis of 22"



RF & Microwave  
Fiber Optics  
Custom Cable  
Multi-pin  
Hermetic Solutions  
Cable Assemblies

#### Interconnect Solutions That Fuel Customer Success

**At Winchester Interconnect, we believe that design creativity and streamlined execution can solve any connectivity challenge.**

We are passionate about helping to deliver the power and data your designs need when failure is not an option. We focus on designing and delivering precision-engineered interconnect solutions for your exact needs, whatever your design challenge.

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#### Winchester Product Brands

Stronger and more unified, Winchester Interconnect now offers solutions under four powerful product brands. Be assured that all of the solutions you rely on today are available from Winchester Interconnect.

For more information, talk to your current sales expert or visit [winconn.com/brands](http://winconn.com/brands).

**Win**  **Tru**  **Win** **Kings**  **Win** **Cadillac**  **Win**