

Roughneck Applications, Features & Benefits

High-amperage connectors for oil drilling applications

Roughneck connectors offer the ultimate performance solution for safety and reliability and can stand up to the rigors of drilling operations under the most extreme conditions.

Applications

Roughneck plugs and receptacles are built to take heavy abuse while providing a simple, secure and safe connection.

Roughneck products are designed specifically for oil and gas drilling applications.

Specifications

Electrical Ratings

- 1000 Volts, MAX AC/DC
- 1135 Amps Continuous (1300 Amps Intermittent)

Temperature Ratings

- -40° C to 125° C

Materials

- Cable Sizes: 313-777 MCM
- Insulator: Rubber
- Receptacle Shell: Epoxy powder coated aluminum alloy
- Hardware: Stainless steel
- Contact: Copper

Environmental

- NEMA 3

Certifications

- cURus: E73864



Features

- 1 Receptacle bus bar can be mounted in the vertical, horizontal or 45° angle position for the ultimate in flexibility
 - 2 Industry exclusive stainless steel rotating latch provides a tool-free, secure connection. Also available in short throw configuration
 - 3 Lockout-Tagout compatible
 - 4 Epoxy, powder-coated shells provide superior corrosion resistance, color-coded to prevent cross-phasing
 - 5 Male contacts are equipped with Cam-Lok's safe front insulated tip
 - 6 Specially plated copper contacts provide minimum resistance and heating
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Available Colors

Ten colors are available to provide easy circuit identification when mating plugs with receptacles. Color coding helps prevent reverse phasing on AC circuits or cross polarization on DC circuits to assure correct rotation of motors while providing for operator safety.

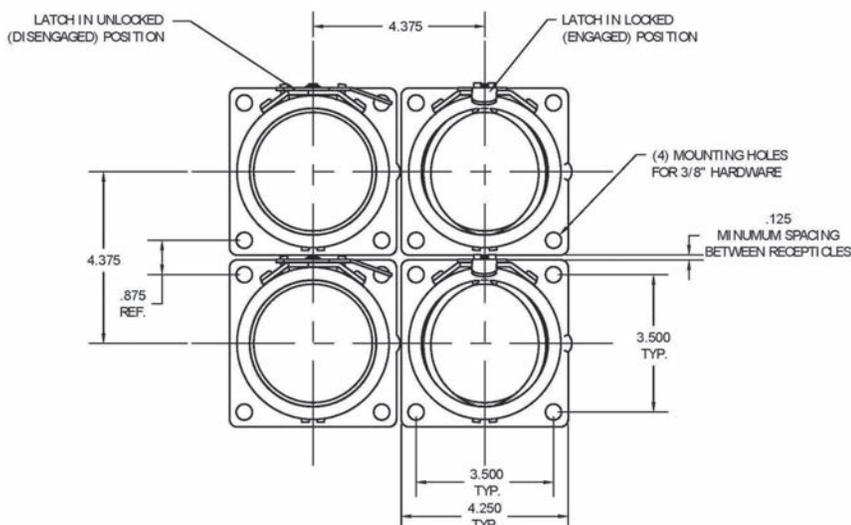


AMPACITY RATING - 40°C AMBIENT

CABLE SIZE	90° C†	125° C†
313 MCM	513 AMPS	636 AMPS
444 MCM	642 AMPS	796 AMPS
535 MCM	724 AMPS	898 AMPS
646 MCM	814 AMPS	1009 AMPS
777 MCM	916 AMPS	1135 AMPS

† Conductor temperature shall not exceed these ratings.

Receptacle housing mounting pattern (rotating latch) (.125" minimum spacing required between receptacles)



Roughneck Connectors

Cooper Interconnect's single-conductor Roughneck High-Amperage Connectors are rugged and weatherproof and provide a high level of indestructibility. They're built to take heavy abuse-resistant to wind, rain, mud, oil and sea water, yet they can be quickly connected and disconnected without any tools.

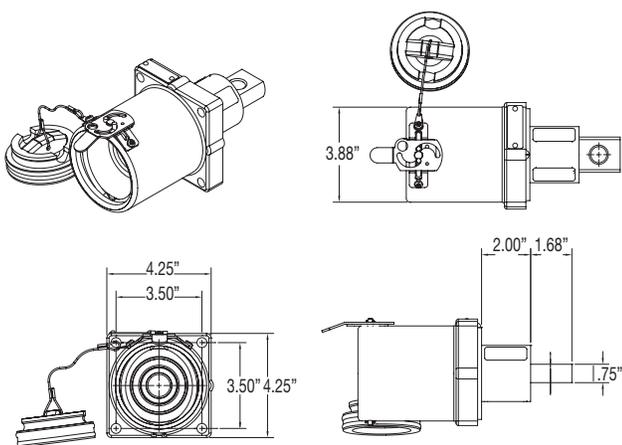
Specially designed to handle a variety of drilling applications, they can be quickly and safely connected to the switchgear, AC or DC sides of the SCR package and carry power to mud pumps and traction motors.

The latching device locks the halves together, eliminating the possibility of accidental disengagement, which can cause disruption of service and electrical shock hazards. The latching device is designed to permit insertion of a lockout/tagout device to provide additional security or the ability to padlock.

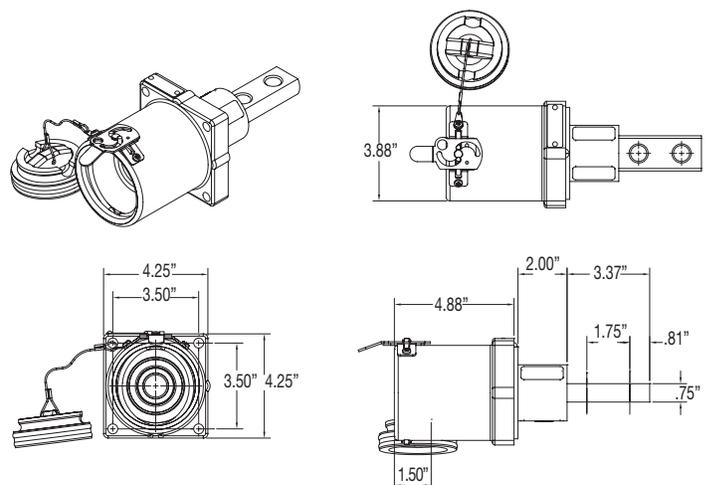
Safety - Roughneck Plugs and Receptacles feature totally shielded contacts. The rubber insulator extends past the ends of both male and female contacts for complete safety. Male contacts are equipped with an insulated tip to minimize potential shock hazard. Roughneck products provide the safest high amperage connector in the industry.

Roughneck Accessories & Dimensions

ROUGHNECK ACCESSORIES			
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
K3326821	Receptacle Repair Kit - Short Throw	201115	Gasket for Receptacle Housing
A101058-2	Clevis Pin for Coupler	A201120-1	Lockout Kit for Padlocking Receptacle
100312-2	Adhesive, 8 oz. Can	A201096-1	Coupler for Mating Male to Female Plug
A201113-1	Receptacle Dust Cover - Short Throw	A201113-5	Receptacle Dust Cover - Rotating Latch
A201113-2	Dust Cover for Male Plug, Black	319735-1	Neoprene Vulcanizing Tape
A201114-2	Dust Cover for Female Plug, Black		



Receptacle Single Hole



Receptacle Double Hole