

# ORDERING INFORMATION

## 500 AMP COUPLER CATALOG NUMBERS

Coupler Rating (A)	Male/Female	Mounting Options	Outside Cable Diameter (mm)	Outside Cable Diameter (in)	Patton & Cooke Catalog Number
500	M	Cable Mount	20.8-47.5	0.82-1.87	C150F1003 x
			47.8-60.2	1.88-2.37	C150F1004 x
			60.5-69.9	2.38-2.75	C150F1005 x
			70.1-88.9	2.76-3.50	C150F1006 x
	F		20.8-47.5	0.82-1.87	C150F2005 x
			47.8-60.2	1.88-2.37	C150F2006 x
			60.5-69.9	2.38-2.75	C150F2007 x
			70.1-88.9	2.76-3.50	C150F2008 x
M	Equipment Mount	N/A	N/A	C150F1007 x	
F		N/A	N/A	C150F2009 x	

## TABLE A: 500 AMP COUPLER CATALOG SUFFIX - x

Max. Cable Size SHD-GC 5 or 8 kV (mm <sup>2</sup> )	SHD-GC 5 or 8 kV (AWG)	x - Cat. No. Suffix	Max. Cable Size SHD-GC 5 or 8 kV (mm <sup>2</sup> )	SHD-GC 5 or 8 kV (AWG)	x - Cat. No. Suffix
34	#2	F	127	250 MCM	M
42	#1	G	152	300 MCM	N
54	1/0	H	178	350 MCM	O
67	2/0	J	203	400 MCM	P
85	3/0	K	228	450 MCM	Q
107	4/0	L	254	500 MCM	R

## COUPLER ENTRANCE FITTING GASKET KITS (FOR CABLE MOUNT COUPLERS)

Outside Cable Diameter (mm)	Outside Cable Diameter (in)	Catalog Number	Outside Cable Diameter (mm)	Outside Cable Diameter (in)	Catalog Number
20.8-22.1	0.82-0.87	C150F3004	51.1-53.8	2.01-2.12	C150F3016
22.4-23.9	0.88-0.94	C150F3005	54.1-57.2	2.13-2.25	C150F3017
24.1-25.7	0.95-1.01	C150F3006	57.4-60.2	2.26-2.37	C150F3018
25.9-26.9	1.02-1.06	C150F3007	60.5-63.5	2.38-2.50	C150F3019
27.2-28.4	1.07-1.12	C150F3008	63.8-66.5	2.51-2.62	C150F3020
28.7-31.8	1.13-1.25	C150F3009	66.8-69.9	2.63-2.75	C150F3021
32.0-34.8	1.26-1.37	C150F3010	70.1-72.9	2.76-2.87	C150F3022
35.0-38.1	1.38-1.50	C150F3011	73.2-76.2	2.88-3.00	C150F3023
38.4-41.1	1.51-1.62	C150F3012	76.5-79.2	3.01-3.12	C150F3024
41.4-44.5	1.63-1.75	C150F3013	79.5-82.6	3.13-3.25	C150F3025
44.7-47.5	1.76-1.87	C150F3014	82.8-85.6	3.26-3.37	C150F3026
47.8-50.8	1.88-2.00	C150F3015	85.9-88.9	3.38-3.50	C150F3027

### SELECTION REMINDERS:

- Each kit consists of 2 clamp inserts and 1 cable gasket.
- Choose the kit to fit the outside diameter of the cable.
- Make sure that the O/D of the kit chosen falls within the outside cable diameter range of the selected cable mounted coupler.

### How to order:

Contact Structure: 3 Power + 1 Ground + 1 Pilot

When ordering the Patton & Cooke 15kV coupler, please specify our **catalog numbers, your cable type, size and diameter**. For cable mount couplers, entrance fitting kits must be purchased separately.

- Determine the following:
  - Male (plug) or female (receptacle) contacts.
  - Cable or equipment mounting.
- For equipment mounting, select catalog number of coupler.
- For cable mounting, determine outside cable diameter and select catalog number of coupler. Clamp inserts and cable gasket must be purchased separately as a kit for the entrance fitting.
- Determine conductor size and substitute appropriate code from Table A for "x" in the catalog number.

### Special Notes:

All couplers and junction boxes are supplied with cover, attachment chain and provision for padlocking two mated couplers and/or covers. Termination kits and potting compound can be purchased separately.

Potting compound is recommended for 15 kV couplers and junction boxes.

Standard terminations for phase and pilot conductors are designed for soldering. Grounds are mechanical type.

Catalog Number will be assigned by Patton & Cooke at time of order entry. Contact factory if preassigned number is required.



### Other options

- Mounting legs
- Mechanical interlock
- Live end cover equipped
- Additional contacts

Please contact your local Patton & Cooke Representative for a complete list of options.



Patton & Cooke Co.

# High Voltage Shore Power Coupler System

For Ship to Shore applications Patton & Cooke Co. offers the 15 kV, 500 Amp C150 Series coupler.

A proven, dependable performer in even the harshest environments, the 15 kV coupler offers many of our most requested design features. But best of all, you choose the features that are right for you from our a-la-carte menu of options. Remove or add features to create the coupler you need, or choose an industry standard configuration.

The Patton & Cooke 15 kV C150 coupler offer a full range of replacement parts so they can easily be rebuilt for longer life and long-term cost savings. In addition, many of these parts are field serviceable so repairs can be done with minimum of downtime.

With over 45 years experience in manufacturing electrical connectors, we understand that not all applications are the same. Different applications and environments often require different products; so when the time comes, contact a Patton & Cooke representative to help you *make the connection*.

## We make the *connection*.

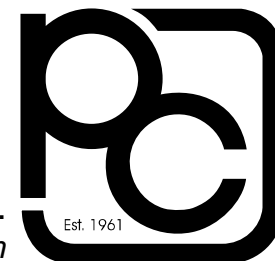
## CONTACT INFORMATION

**Mailing Address:**  
100 - 7795 128th Street  
Surrey, B.C. Canada  
V3W 4E6



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Please visit us at [www.pattonandcooke.com](http://www.pattonandcooke.com)



Patton & Cooke Co.  
We Make the Connection

## APPLICATIONS



LNG Carriers

Containers

Cranes

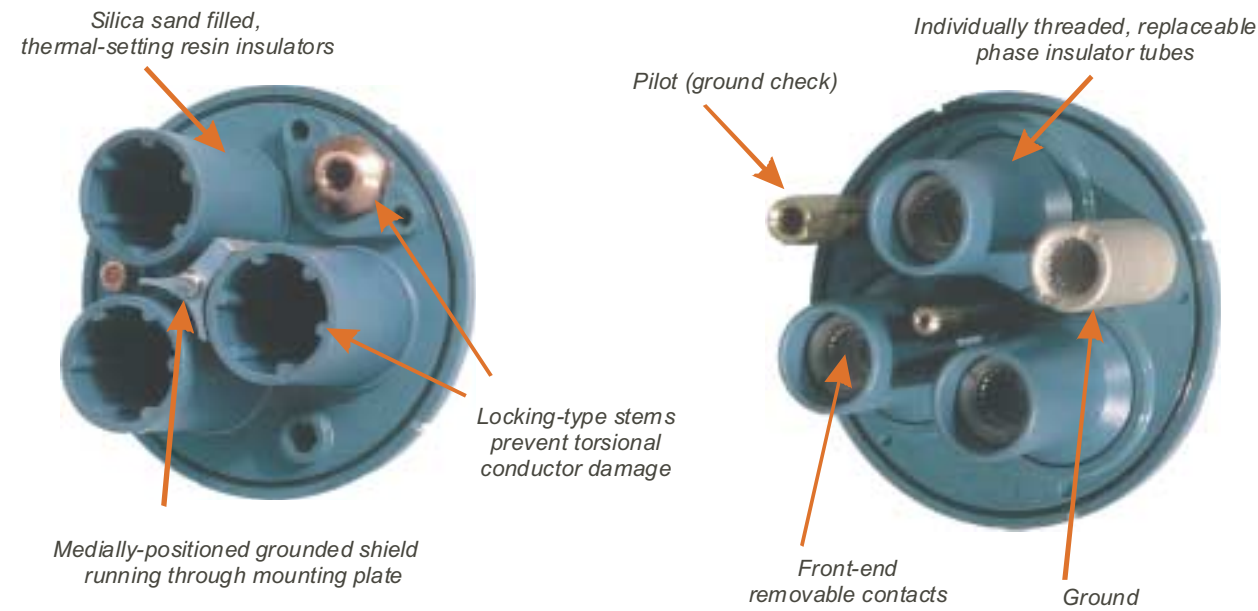
Tankers

Ro/Ro (Roll on/Roll off) Ships

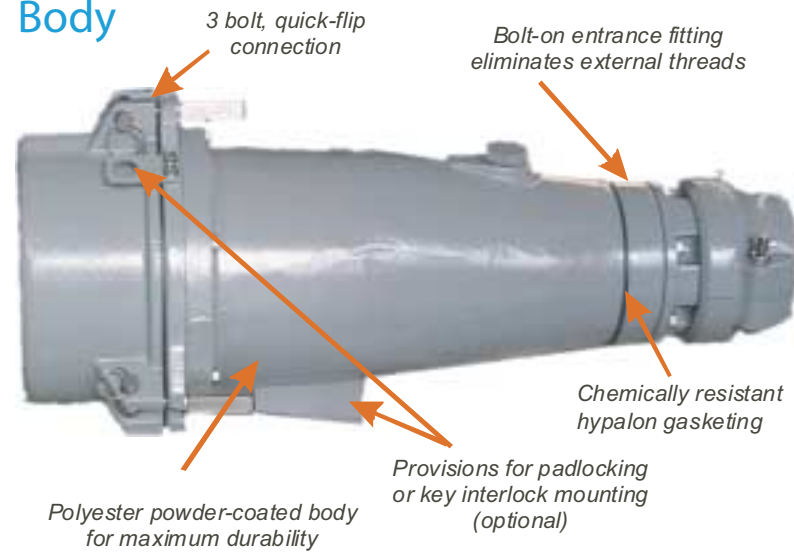


# 15kV Design Features

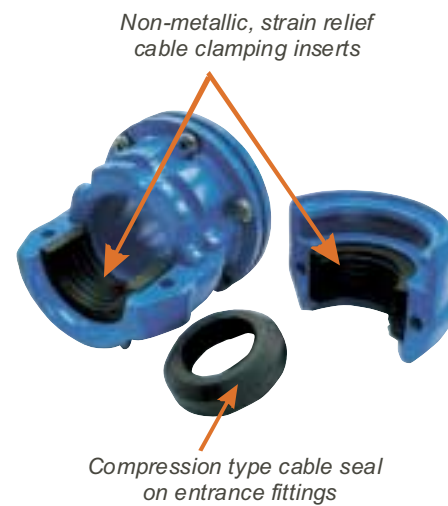
## Insulator



## Body



## Entrance Fitting Kit



The standard contact arrangement for the 15 kV coupler includes three insulated phase contacts, one ground contact, and one isolated pilot contact.



### ELECTRICAL DATA

Coupler voltage class	15.0kV
1 minute dry withstand (AC)	50.0kV
6 hour dry withstand (AC)	35.0kV
15 minute dry withstand (AC)	75.0kV
Basic impulse level (BIL)	95.0kV
Corona extinction voltage (BIL)	13.0kV
Short circuit fault level	41.2kA
	RMS



Conversion Kits

# Featured Applications Princess Cruise Lines

## Features:

- **Quick coupler system:** meets requirement for fast power transition (less than 1/2 hour)
- **Dual voltage compatibility:** supplies both 11kV and 6.6kV vessels at up to 13MW
- **Robust design:** a proven performer, ensuring a lasting and reliable connection in the harshest marine environments

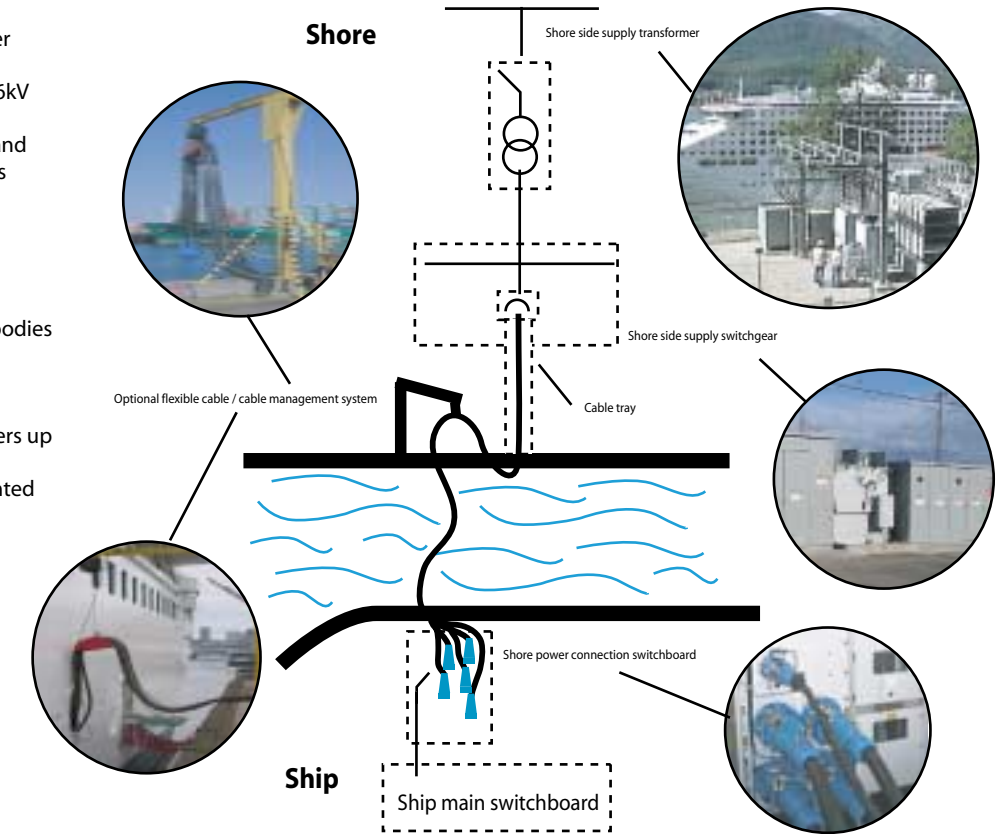
## Specifications:

- Front end serviceable contacts
- Fire retardant insulators
- Corrosion resistant, epoxy coated, anodized aluminum bodies
- Secure three bolt, quick flip connection
- Self-aligning housings
- Ground check (pilot) system protection
- Accepts conductors to 500 MCM (250 mm<sup>2</sup>) and diameters up to 3.5" (90mm) larger sizes available on request
- Silver-plated male and female phase contacts with patented multilam contact band arrangement

## Benefits

- Provides access to clean shore power
- Fast and safe installation: coupling system is easily managed by crew and shore personnel
- Pilot wire system for added safety
- Easy, on-site front-end maintenance of live parts

## On Shore Power Supply (OPS)



## Crane Application

## Features:

- **Quick coupler system:** helps minimize crane downtime caused by damaged cables by enabling fast changeout of equipment or access to auxilliary power supplies
- **Marine grade construction:**
  - Heat treated, anodized, aluminum castings
  - Stainless steel hardware
  - Hypalon gaskets
  - Heavy-duty polyester powder coating
- **Fiber Optic Capabilities**
  - Available with provision for managing cables with integrated fiber optic bundle

## Specifications:

- Front end serviceable contacts
- Fire retardant insulators
- Corrosion resistant, epoxy coated, anodized aluminum bodies
- Secure three bolt, quick flip connection
- Self-aligning housings
- Ground check (pilot) system protection
- Accepts conductors to 500 MCM (250 mm<sup>2</sup>) and diameters up to 3.5" (90mm) larger sizes available on request
- Silver-plated male and female phase contacts with patented multilam contact band arrangement

## Benefits

- Reduce crane downtime
- Easy, on-site front-end maintenance of live parts

## Container Crane Power Supply

