



PATTON & COOKE 6.6/11kV, 500 Amp Shore Power Crane Cable Couplers



Patton & Cooke shore power cable couplers provide ships to clean, hydroelectrically generated shore power. These couplers were designed for fast and safe installation by single crew or shore personnel. Its compact, durable construction is built to last in harsh marine conditions.

PRODUCT FEATURES & BENEFITS

- **Quick Coupler System:** Helps minimize crane downtime caused by damaged cables by enabling fast changeout of equipment or access to auxiliary power supplies.
- **Marine Grade Construction:** Heat treated 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.
- Provisions for padlocking or key interlock mounting
- Front end serviceable contacts for easier service
- Self-aligning housing for rapid coupling/uncoupling
- Ground check pilot system protection
- Solder type or solderless conductor stems (for <8kV)
- Secure three bolt, quick flip connection (for <8kV)



PRODUCT OPTIONS

- Available as a cable mount or equipment mount
- Durable, powder coat finish (various colours).
- Optional "Key Interlock" system is an additional optional feature in the 15 kV system that prevents coupler disconnection, without prior switch house lock out.
- Shorting caps & Live end covers available
- Rotated phases

High Voltage Equipment Solutions. Design and Manufacturing.

CHOOSING YOUR COUPLER

Contact Structure: 3 Power + 1 Ground + 1 Pilot

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

STEP 1

1. Determine the following: Male (Plug) or Female (Receptacle) contacts (Table A).
2. For equipment mounting, select catalogue number of coupler
3. For cable mounting, determine the outside cable diameter and select catalogue number of coupler

STEP 2

Determine the conductor size and substitute appropriate code for "x" in the catalogue number (Table B).

STEP 3

Determine the powder coating colour and substitute appropriate code from Table C into position "y" of the selected part number.

STEP 4

Determine exact cable O.D. and choose appropriate entrance fitting gasket kit (Table D).

RTG - CRANE POWER PART NUMBERS

TABLE A: 500 AMP COUPLER CATALOGUE NUMBERS

Coupler Rating (A)	Male/Female	Mounting Options	Outside Cable Diameter Range		Patton & Cooke Catalogue Number
			(mm)	(in)	
500	M	Cable Mount	20.8-47.5	0.82-1.87	C150F1003_{x-y} C150F1004_{x-y} C150F1005_{x-y} C150F1006_{x-y}
			47.8-60.2	1.88-2.37	
			60.5-69.9	2.38-2.75	
			70.1-88.9	2.76-3.50	
	F		20.8-47.5	0.82-1.87	C150F2005_{x-y} C150F2006_{x-y} C150F2007_{x-y} C150F2008_{x-y}
			47.8-60.2	1.88-2.37	
			60.5-69.9	2.38-2.75	
			70.1-88.9	2.76-3.50	
M	Equipment Mount	N/A		C150F1007_{x-y}	
F		N/A		C150F2009_{x-y}	

TABLE B: 500 AMP COUPLER CATALOGUE SUFFIX - x

Max. Cable Size SHD-GC 5 - 25 kV		x-Cat. No. Suffix	Max. Cable Size SHD-GC 5 - 25 kV		x-Cat. No. Suffix
(mm ²)	(AWG)		(mm ²)	(AWG)	
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

TABLE C: ELECTROSTATIC EPOXY POWDER COATING SUFFIX - y

Colour	Code	Colour	Code
Blue	EB	Grey	EGR
Orange	EO	Brown	EBR
White	EW	Black	EBK
Yellow	EY	Violet	EV
Green	EG	Blue Grey	EBG
Red	ER		

TABLE D: COUPLER ENTRANCE FITTING GASKET KITS (FOR CABLE MOUNT COUPLERS)

Outside Cable Diameter		Catalogue Number	Outside Cable Diameter		Catalogue Number
(mm)	(in)		(mm)	(in)	
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

PRODUCT SPECIFICATIONS

Maximum Voltage 15 kV; Maximum Amperage 500A	6 Hour Dry Withstand(AC): 35kV
1 Minute Dry Withstand (AC): 55kV	15 Minutes Dry Withstand (AC): 75kV
Basic Impulse Level (BIL): 95kV	Short Circuit Fault Levels: 41.2 kA RMS
Stainless Steel Hardware	Corona extinction voltage (BIL): 13kV
Heat Treated Anodized Aluminum Casting	Heavy-duty Polyester Powder Coating
Fire Retardant Insulators	Accepts Conductors to 500MCM (250mm ²) and diameters up to 3.5" (90mm)

HOW TO ORDER

For a copy of our product catalogue, or for further information about our growing range of high voltage electrical equipment for the shorepower industry, call or email us

PATTON & COOKE CO.

#100 - 7795 128th Street,
Surrey, BC V3W 4E6
CANADA

PHONE: 604.591.5374

TOLL FREE: 1.866.591.5374 (N. America)

FAX: 604.591.3505

EMAIL: info@pattonandcooke.com

WEBSITE: www.pattonandcooke.com