

PATTON & COOKE CO.

5/8 kV

CABLE COUPLERS

250 Amp 3 Power + 1 Ground + 1 Pilot
400 Amp 3 Power + 2 Ground + 1 Pilot
500 Amp 3 Power + 1 Ground + 1 Pilot

As mining equipment has increased in size, so too has their demand for power. To meet these increasing power requirements, Patton & Cooke introduced the C80 Series 250, 400, and 500 Amp couplers. The C80 series incorporates all of our standard features, but with added design features to give reliable and lasting performance at higher current levels.

APPLICATIONS:

- Mining (Shovels, Drills, Continuous Miners, Conveyors)
- Shore to Ship
- Tunneling
- Portable Power Generation
- Dewatering

DESIGN:

Body: Aluminum

Insulator Characteristics: Individual Tube

Voltage: 5/8 kV

Current Rating: 250, 400, & 500 Amp

Cable Range: 0.82"-3.54" (21 mm - 89 mm)

IP Rating: 67

OPTIONS:

- Powder Coating
- Closing Tool
- Junction Box
- Fiber Optics
- Light Rings
- Live End Covers
- Shorting Caps

APPLICABLE TEST STANDARD:

- M421
- IEEE 48



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250 & 400 AMP PRODUCT FEATURES:

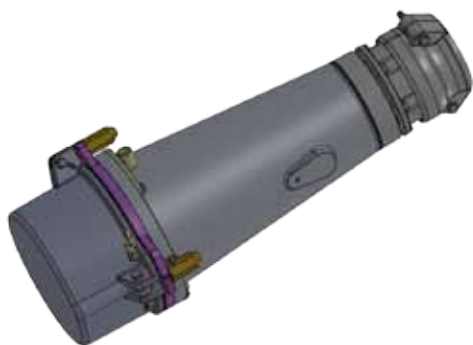


- Fully shielded phase conductors
- Individually replaceable phase tubes
- Standard solderless stems
- Quick flip front body
- 1 or 2 piece design

250 & 400 AMP COUPLER & JUNCTION BOX

Illustration (not to scale)	Coupler Rating (A)	Catalogue Number	Dimensions				Weight
			A	B	C	D	
CABLE MOUNT MALE 	250	C80C1003 C80C1004 C80C1005 C80C1006	17" 432 mm	9 1/2" 241 mm	21" 533 mm		31.0 lb 14.0 kg
	400	C80D1013 C80D1014 C80D1015 C80D1016	17" 432 mm	9 1/2" 241 mm	21" 533 mm		32.0 lb 14.5 kg
EQUIPMENT MOUNT MALE 	250	C80C1007	7 1/2" 191 mm	10 1/2" 267 mm	12" 305 mm	9 1/4" 235 mm	24.0 lb 11.0 kg
	400	C80D1017	7 1/2" 191 mm	10 1/2" 267 mm	21" 533 mm	9 1/4" 235 mm	25.0 lb 11.5 kg
CABLE MOUNT FEMALE 	250	C80C2004 C80C2005 C80C2006 C80C2007	20" 508 mm	9 1/2" 241 mm	23" 584 mm		33.0 lb 15.0 kg
	400	C80D2014 C80D2015 C80D2016 C80D2017	20" 508 mm	9 1/2" 241 mm	23" 584 mm		34.0 lb 15.3 kg
EQUIPMENT MOUNT FEMALE 	250	C80C2003	10 5/8" 272 mm	10 1/2" 267 mm	13 1/2" 343 mm	9 1/4" 235 mm	26.0 lb 12.0 kg
	400	C80D2018	10 5/8" 272 mm	10 1/2" 267 mm	13 1/2" 343 mm	9 1/4" 235 mm	27.0 lb 12.3 kg
JUNCTION BOX 	250	C80C3004	34 1/2" 876 mm	10 1/2" 267 mm	8" 203 mm	5 1/4" 133 mm	90.0 lb 41.0 kg
	400	C80D3007	34 1/2" 876 mm	10 1/2" 267 mm	8" 203 mm	5 1/4" 133 mm	92.0 lb 42.0 kg

500 AMP PRODUCT FEATURES:



- Easy maintenance with front end removable contacts
- Fire retardant insulators
- Corrosion-resistant, cast aluminum or epoxy powder coated bodies
- Secure three bolt, quick flip connection
- Medially-located grounded surface running through mounting plate
- Accepts conductors to 500 MCM (250 mm²) and diameters up to 3.5" (90 mm)
- Silver-plated male and female phase contacts
- Weatherproof covers

500 AMP COUPLER & JUNCTION BOX

Illustration (not to scale)	Coupler Rating (A)	Catalogue Number	Dimensions					Weight
			A	B	C	D	E	
<p>CABLE MOUNT MALE</p>	500	C80F1030 C80F1031 C80F1032 C80F1033	20 ¼" 514 mm	24 ½" 267 mm	24 ½" 622 mm			38.0 lb 17.0 kg
<p>EQUIPMENT MOUNT MALE</p>	500	C80F1004	4 ¾" 121 mm	12 ¼" 311 mm	9" 229 mm	11" 279 mm	1 ½" 38 mm	32.0 lb 14.5 kg
<p>CABLE MOUNT FEMALE</p>	500	C80F2030 C80F2031 C80F2032 C80F2033	24" 610 mm	11 ½" 292 mm	27" 686 mm			38.0 lb 17.0 kg
<p>EQUIPMENT MOUNT FEMALE</p>	500	C80F2004	5 ¼" 133 mm	12 ¼" 311 mm	8 ¼" 210 mm	11" 279 mm	4" 102 mm	27.0 lb 12.3 kg
<p>JUNCTION BOX</p>	500	C80F3xxx	16 ¼" 413 mm	14 ¼" 362 mm	32" 813 mm			100.0 lb 45.0 kg

5/8 kV TERMINATION KITS:

Patton & Cooke Catalogue Number	Approximate Conductor Range for 5/8kV SHD-GC Cable	Insulation O.D.
11Y08/15-A	#2-250 MCM	15-25 mm
		0.591-0.984"
11Y08/15-B	3/0-500 MCM	20-32 mm
		0.787-1.259"
11Y08/15-C	500 MCM	27-42 mm
		1.063-1.654"



5/8 kV POTTING COMPOUND:



GUROFLEX POTTING COMPOUND KITS

OS-J990-MV5 = 304 Sq. Inch Volume

COMPOUND REQUIRED FOR COUPLERS

C80C Series = 330 Sq. Inch = 1 OS-J990-MV5

C80D Series = 330 Sq. Inch = 1 OS-J990-MV5

C80F Series = 417 Sq. Inch = 1 OS-J990-MV5

5/8 kV ENTRANCE FITTING GASKET KITS:

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

SELECTION REMINDERS:

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

