

BUS CONNECTORS



Current Cycle Testing



Temperature Rise Testing



Bend Testing



Vibration Testing

PLK1000

SPLICE

1'-0"	3'-0"	5'-0"	2' steps
230kV	500kV	765kV	~4 lbs
Co. 01100	PL1000	DR	



ORDERING EXAMPLE

PLK1000D18
1" Aluminum Splice

PLK1010

SPLICE REDUCER

1'-0"	2'-0"	3'-0"	2' steps
230kV	500kV	765kV	~5 lbs
Co. 01100	DR		



ORDERING EXAMPLE

PLK1010D 24 64
2 3/4" to 4" Aluminum
Splice Reducer

SPLICES

PLK1160

GROUND STUD ASSEMBLY

1' - 0"	2' steps	
230kV	~4 lbs	
Co. 01160	PL1160	DR



ORDERING EXAMPLE

PLK1160D48
3" Aluminum Splice with
Ground Stud

PLK3160

EHV GROUND STUD WITH BALL

1'-0"	2' steps	
500kV	~6 lbs	
Co. 01360	PL3160	DR



ORDERING EXAMPLE

PLK3160D64-12 Ball
Diameter
4" Aluminum EHV Splice with
800kV, 12" Ball Ground Stud

GROUNDING

PLK1161

GROUND STIRRUP

1'-0"	2' steps	
230kV	-7 lbs	
Co. 01161	PL1161	DR



ORDERING EXAMPLE

PLK1161D80
8" Aluminum Splice with

PLK1165

DUAL GROUND STUD ASSEMBLY

1'-0"	2' steps	
230kV	~5 lbs	
Co. 01165	PL1165	DR



ORDERING EXAMPLE

PLK1165D24
1-1/2" Aluminum Splice with



SPLIT FITTINGS FOR EASY INSTALLATION

Many of our connectors can be made with a split main run, making it easy to tap onto existing Bus structures. Simply place one half of the fitting over the Bus bar and slide the other half into the interlocking grooves. The two halves are now surrounding the Bus bar and can be securely Swaged on each end in seconds.

Look for this icon  and the corresponding base part number on our most popular split fitting connectors, or just replace the first digit (PLK1###) with a 5 (PLK5###) for your new split fitting part number.

APPLICATION NOTES



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4-HOLE TERMINALS

PLK1850

4-HOLE CENTER FORMED PAD TERMINAL

1" - 2"	2 1/2" - 4"	Pad	2 Weight
345kV	500kV	3" / 4"	~4 lbs
CRUSH	ANAL	SW	
NO WELD	3 x 3"	3 x 3"	



ORDERING EXAMPLE

PLK1850D80 B Pad Width
8" Aluminum Terminal with
4", 4-Hole Center Formed Pad

PLK1880

4-HOLE OFFSET PAD TERMINAL

1" - 2"	2 1/2" - 4"	Pad	2 Weight
345kV	500kV	3" / 4"	~4 lbs
CRUSH	ANAL	SW	
NO WELD	3 x 3"	3 x 3"	



ORDERING EXAMPLE

PLK1880D24 A Pad Width
1-1/2" Aluminum Terminal with
3", 4-Hole Offset Pad



ANGLED PAD OPTIONS:

Copper, 3" pad, EHV and custom angles are available. Visit the product page on DMCPower.com for details.

PLK1863

4-HOLE 30° ANGLED PAD



PLK1860

4-HOLE 45° ANGLED PAD



PLK1866

4-HOLE 60° ANGLED PAD



PLK1870

4-HOLE 90° ANGLED PAD



CUSTOM SOLUTIONS

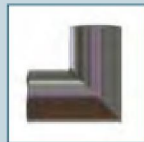


ANY CONNECTOR. ANY ANGLE.

Of course we have standard 15°, 30°, 45°, 60°, 75° & 90° angled parts, but what happens when something doesn't match up exactly as designed, shifts over time or needs to be cut out and replaced?

Because we can custom make each individual connector to your exact specifications, any standard or custom angle combination is possible.

This icon  indicates we have numerous options ready to be machined for the part listed, just call **888-SWAGE-NOW** with your specs and let DMC Power take care of the rest.



90° Angle



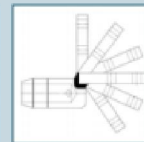
75° Angle



60° Angle



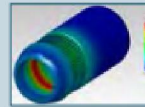
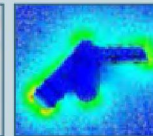
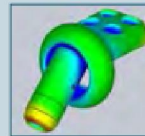
45° Angle



Custom Angles

NEXT GENERATION ENGINEERING

From computer simulations and tensile testing to delivering the final AUTOCAD Drawing and Connectors, DMC Power's in-house engineering and R&D team can design, test and deliver any connector faster than anyone. Contact your local Territory Manager to get your custom project started today.



SUPERIOR DESIGN



CABLE CONNECTORS

- Aluminum or Copper material
- AAC, ACSR, ACAR, Ropelay, Copper & Metric Cables
- Pre-drilled inspection/weep hole
- Split, EHV and tin-plated versions available
- Custom angles, pads and barrel spacing
- Single Swage installation
- Instant inspection with Go/No-Go Gauge
- No bird caging or bent connectors

STATE OF THE ART SWAGE TECHNOLOGY

Substation customers around the world trust DMC Power's patented Swage system on their most critical Transmission and Distribution connections.

Once you experience the peace of mind that our superior connection provides and the all-weather, time saving capabilities of our cutting edge design, you'll never go back to your old way of installing electrical cable connections again.

Cable Swage System Advantages:



Our connectors are available in a variety of configurations and sizes to handle any cable job

• SAVE TIME

Lightweight tool uses just one 360° compression instead of multiple crimps.

• COMPLETE 360° CONTACT

Swaging creates a virtually void free connection and maximizes conductivity by compressing the interior of the fitting around the exterior of the cable.

• FINISHED PADS

Both sides of the extruded aluminum pad can be used equally as a connection surface.

• TIN PLATING

Available on all connectors for use with dissimilar metals and to deter copper theft.

• SIMPLE ONE-STEP INSPECTION

Easily inspect your Swage in seconds with the handheld "Go/No-Go" Inspection Gauge.

• CUSTOM SOLUTIONS AVAILABLE

A wide range of cable configurations and connector types (including Ropelay Cable, metric sizes, copper and EHV rated parts) are available for any type of job.

For those times you need a quick or custom solution, DMC Power is here to help. Our in-house engineering, R&D, manufacturing and testing teams will develop and deliver exactly what you need faster than anyone else.



The lightweight Swage Tool connects cables in even the most hard to reach places

DMC Power's cable connectors are qualified to meet or exceed nationally recognized standards and tests

Cable Connector Qualifications

ANSI C119.4	Tensile: 90%-99% (Min/Max) of conductor strength; 5% required for Class B connectors Current Cycle: 500 cycles (class A); met all thermal & resistance requirements Pre-existing Cables: After tapping into run, Swaged cable retained 90% of rated strength
ASTM B117	Salt Fog: 1,000 hours passed
NEMA CC1	RIV/Corona: Up to 500 kV with factor of safety on applicable fittings Temp Rise & Resistance: Runs cooler than cable at 100%, 125% & 150% of ratings requirements
Customer Requirements	Short Circuit Tests: Pass 3 second short-time & 15 cycle peak withstand tests

1 & 2-HOLE TERMINALS

CPLK9100 1-HOLE CENTER FORMED PAD TERMINAL

Up to **230kV** Pad **2"** 2' O'Length **~3 lbs**
C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9100D000040
4/0 Oslip AAC Barrel to 1", 1-Hole
Center Formed Pad; Aluminum

CPLK9200 2-HOLE CENTER FORMED PAD TERMINAL

Up to **230kV** Pad **2"** 2' O'Length **~3 lbs**
C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9200D07000
700 Flag AAC Barrel to 2", 2-Hole
Center Formed Pad; Aluminum

CPLK9202 2-HOLE OFFSET PAD TERMINAL

Up to **230kV** Pad **2"** 2' O'Length **~3 lbs**
C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9202D15105
1351.5 Martin ACSR Barrel to 2",
2-Hole Offset Pad; Aluminum

CPLK9209 2-HOLE 90° PAD TERMINAL

Up to **230kV** Pad **2"** 2' O'Length **~3 lbs**
C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9209D03975
338.4 Linnet ACSR Barrel to 2",
2-Hole 90° Pad; Aluminum

6-HOLE TERMINALS

CPLK9662 DUAL BARRELS TO 6-HOLE OFFSET PAD TERMINAL

Up to **345kV** Pad **5 7/8"** 4' O'Length **~7 lbs**
C-CLAMP 6" C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9662D20000
Dual 2000 Cowalip AAC Barrels to
6", 6-Hole Offset Pad; Aluminum

CPLK9664 DUAL BARRELS TO 6-HOLE 45° PAD TERMINAL

Up to **345kV** Pad **5 7/8"** 4' O'Length **~7 lbs**
C-CLAMP 6" C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9664D22500
Dual 2156 Bluebird ACSR Barrels to
6", 6-Hole 45° Pad; Aluminum

CPLK9663 DUAL BARRELS TO 6-HOLE 30° PAD TERMINAL

Up to **345kV** Pad **5 7/8"** 4' O'Length **~7 lbs**
C-CLAMP 6" C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9663D17500
Dual 1750 Jasmine AAC Barrels to
6", 6-Hole 30° Pad; Aluminum

CPLK9672 TRIPLE BARRELS TO 6-HOLE OFFSET PAD TERMINAL

Up to **345kV** Pad **5 7/8"** 4' O'Length **~10 lbs**
C-CLAMP A-ANGLE



ORDERING EXAMPLE

CPLK9672D15900
Three 1590 Corncobs AAC Barrels
to 6", 6-Hole Offset Pad; Aluminum

CUSTOM PAD WIDTHS

Many of our connectors have alternative part numbers for different standard pad widths. Look for this icon **5" CLEMMER** underneath the item to see the alternative pad size and standard part number. Of course ANY custom pad configuration can be designed, so if you don't see it just ask!



4-HOLE TERMINALS

CPLK9440

4-HOLE CENTER FORMED PAD TERMINAL

230kV 3 7/8" ~5 lbs

0.0200 0.0200 0.0200 0.0200

ORDERING EXAMPLE

CPLK9440D00020

200 Aster ACC Barrel to 4", 4-Hole Center Formed Pad; Aluminum



CPLK9442

4-HOLE OFFSET PAD TERMINAL

345kV 3 7/8" ~5 lbs

0.0200 0.0200 0.0200 0.0200

ORDERING EXAMPLE

CPLK9442D13515

1272 Blitem ACSR Barrel to 4", 4-Hole Offset Pad; Aluminum



CPLK9444

4-HOLE 45° PAD TERMINAL

345kV 3 7/8" ~5 lbs

0.0200 0.0200 0.0200 0.0200

ORDERING EXAMPLE

CPLK9444D07500

750 Catell AAC Barrel to 4", 4-Hole 45° Pad; Aluminum



CPLK9449

4-HOLE 90° PAD TERMINAL

230kV 3 7/8" ~5 lbs

0.0200 0.0200 0.0200 0.0200

ORDERING EXAMPLE

CPLK9449D22500

2167 Kiwi ACSR Barrel to 4", 4-Hole 90° Pad; Aluminum



CL702

PARALLEL CABLE SPACER

500kV ~3 lbs

0.0200 0.0200 0.0200 0.0200

ORDERING EXAMPLE

CL702D09540-8

Cable Run Size Spacing Inches
Dual 954 Magnolia AAC Cables Spaced 8"; Aluminum



CL714

PARALLEL CABLE SPACER TO TRANSVERSE 4-HOLE PAD

500kV 3 7/8" ~5 lbs

0.0200 0.0200 0.0200 0.0200

ORDERING EXAMPLE

CL714D22500-18

Cable Run Size Spacing Inches
Dual 2167 Kiwi ACSR Cables Spaced 18" with 4", 4-Hole Transverse Pad; Aluminum



ALSO AVAILABLE:

CL715

CABLE SPACER TO LONGITUDINAL PAD



CL773

TRIFURCATING CABLE SPACER



CABLE SPACERS

CEHV9440

EHV 4-HOLE CENTER FORMED PAD TERMINAL

345kV
~2 lbs



ORDERING EXAMPLE

CEHV9440D12720

1272 Narvik AAC Barrel to 4", 4-Hole Center Formed Pad; EHV

CEHV9442

EHV 4-HOLE OFFSET PAD TERMINAL

500kV
~6 lbs



ORDERING EXAMPLE

CEHV9442D22500

2166 Bluebird ACSR Barrel to 4", 4-Hole Offset Pad; EHV

CEHV9444

EHV 4-HOLE 45° PAD TERMINAL

500kV
~6 lbs



ORDERING EXAMPLE

CEHV9444D10000

1000 Hawkweed AAC Barrel to 4", 4-Hole 45° Pad; EHV

CEHV9642

EHV DUAL BARRELS TO 4-HOLE CENTER FORMED PAD TERMINAL

500kV
~10 lbs



ORDERING EXAMPLE

CEHV9642D22500

Dual 2250 Sagebrush AAC Barrels to 4", 4-Hole Center Formed Pad; EHV

CEHV9644

EHV DUAL BARRELS TO 4-HOLE 45° PAD TERMINAL

500kV
~11 lbs



ORDERING EXAMPLE

CEHV9644D22500

Dual 2166 Bluebird ACSR Barrels to 4", 4-Hole 45° Pad; EHV

CEHV9649

EHV DUAL BARRELS TO 4-HOLE 90° PAD TERMINAL

500kV
~12 lbs



ORDERING EXAMPLE

CEHV9649D09540

Dual 900 Ruddy ACSR Barrels to 4", 4-Hole 90° Pad; EHV

APPLICATION NOTES



EXTRA HIGH VOLTAGE RATINGS

Many of our Cable and Bus connectors have EHV equivalents rated up to 500kV and 765kV.

- Tested Corona free
- Reduced power loss and radio noise
- Pre-drilled weep holes and high quality surface finish
- Designed-in shielding rings with generous mass & radii for high ampacity and voltage

Look for this symbol  below the parts to know they are rated for certain EHV applications or let us design a custom EHV connector for your specific needs.

GROUND CONNECTORS

CROSSES & TEES

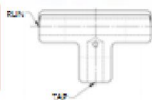
GC733 SPLIT RUN TEE

~15 lbs
GND SPLIT THRU RUN

ORDERING EXAMPLE

GC733B025-500

Tee with 250 MCM Split Run and 1/2" Ground Rod Tap



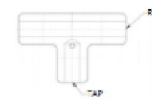
GC731 THRU RUN TEE

~15 lbs
GND THRU RUN

ORDERING EXAMPLE

GC731B002-025

Tee with 2/0 AWG Thru Run and 250 MCM Tap



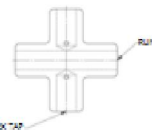
GC741 THRU HOLE CROSS

~2 lbs
GND THRU HOLE

ORDERING EXAMPLE

GC741B025-002

Cross with 250 MCM Thru Run and two, 2/0 AWG Taps



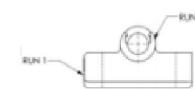
GC742 OFFSET DUAL SPLIT CROSS

~2 lbs
GND SPLIT

ORDERING EXAMPLE

GC742B003-003

Offset Cross with 3/0 AWG and 3/0 AWG Split Runs



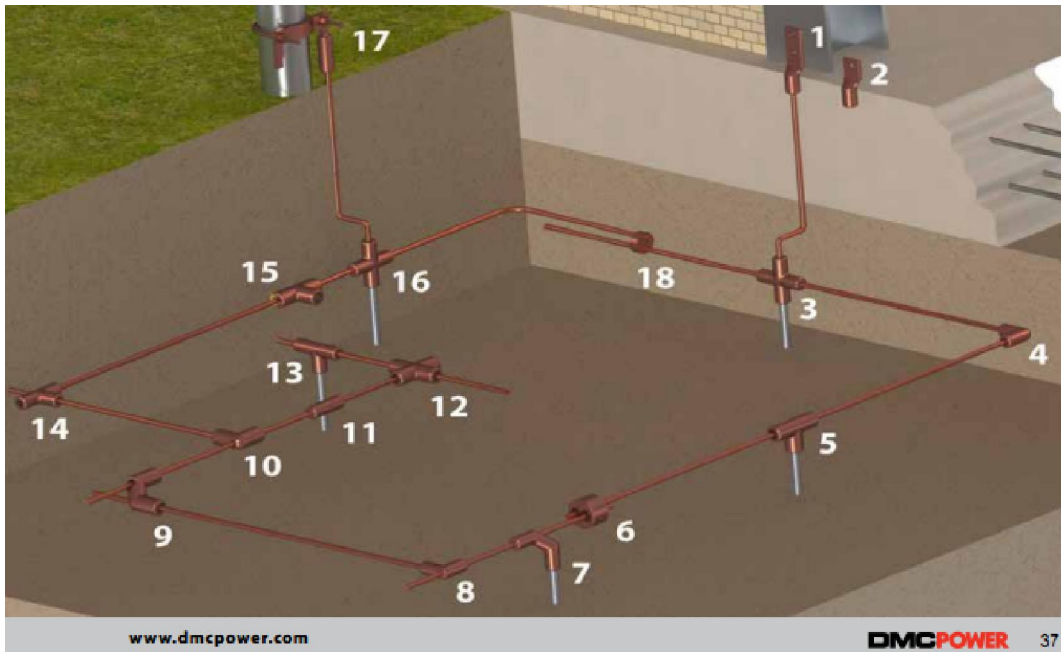
APPLICATION NOTES



SIMPLIFY YOUR GROUND GRID USING 3 CONNECTORS

DMC Power Grounding connectors can be used in a variety of ways beyond their intended purpose. In fact, many customers have completed their entire grid with only the 3 parts on the following page:





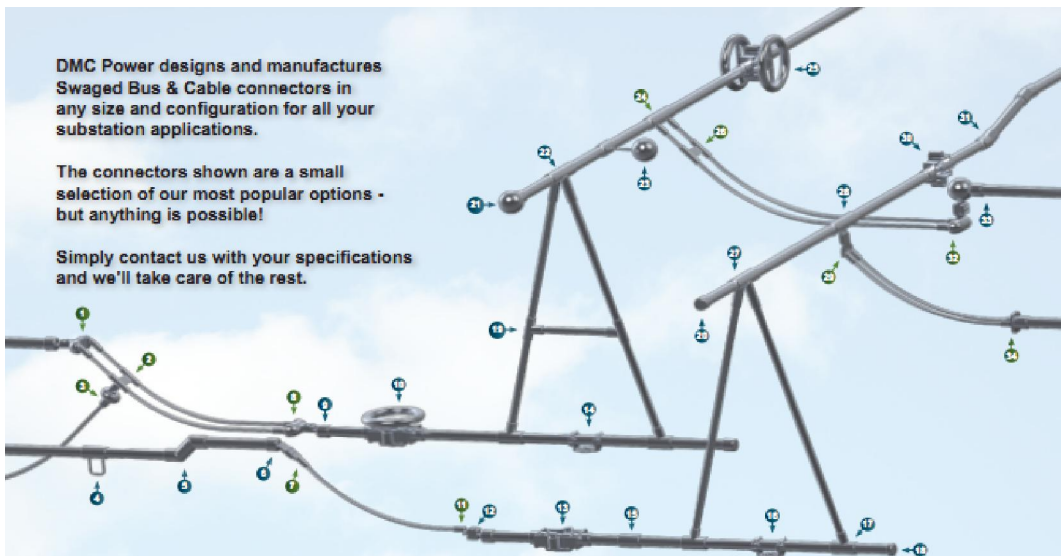
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DMC Power designs and manufactures Swaged Bus & Cable connectors in any size and configuration for all your substation applications.

The connectors shown are a small selection of our most popular options - but anything is possible!

Simply contact us with your specifications and we'll take care of the rest.



BUS & CABLE Connectors

1. CEHV9644 - Dual 45° EHV Terminal
2. CL714 - Cable Spacer with Pad
3. CEHV9442 - Offset EHV Terminal
4. PLK1161 - Ground Stirrup
5. PLK1039 - Offset Splice

6. PLK1860 - 45° Terminal
7. CPLK9440 - Center Formed Terminal
8. CEHV9642 - Dual Cent Form EHV Terminal
9. PLK1850 - Center Formed Terminal
10. PLK3700 - EHV Expansion Support
11. CPLK8442 - Offset Terminal
12. PLK8000 - Bolt Shield
13. PLK2700 - Expansion Support
14. PLK3230 - EHV Bus Support
15. PLK1000 - Splice

16. PLK2230 - Bus Support
17. PLK1800 - Bus Tee
18. PLK1310 - Low Profile End Cap
19. PLK5500 - Split Run Tee
20. PLK1350 - End Cap
21. PLK3361 - Round EHV End cap
22. PLK1600 - AvFrame
23. PLK3160 - Ground Stud with Ball
24. CL432 - Bus to Dual Cable Taps
25. PLK3810 - EHV Expansion

26. CL702 - Parallel Spacer
27. PLK5600 - Split AvFrame
28. PLK1100 - 4-Hole Pad Tee
29. CPLK9644 - 2 Barrel, 45° Terminal
30. PLK2810 - Expansion
31. PLK1400 - Elbow
32. CEHV9649 - Dual 90° EHV Terminal
33. PLK3870 - EHV Terminal to 90° Pad
34. CL420 - Bus to Dual Cable Taps