



SPPC

SINGLE POLE POWER CONNECTORS

SPPC-PWL: Power connectors, 400A / 750A
SPPC-HK: Compact power connectors, 250A / 400A
SPPC-LJP: Lug Joint Protector



About Us



Radiall

Since 1952, Radiall Sa have been enabling the future through collaboration with our customers. The results are a range of innovative and award-winning products that customers trust for unrivaled repeatability and performance.

Radiall Sa are a global company with facilities around the world that specializes in manufacturing the highest quality interconnect components to support the most demanding applications.

At Radiall, you can rely on us to be the industry's global market leader.



VanSystem is a company founded in Lombardy - Italy, which has been operating since 1985 in the industrial market. Since 2015 VanSystem is a Radiall company.

Besides connectors with screw or bayonet coupling complying with the Mil-DTL-5015 standard, VanSystem designs and manufactures non-standard products for special applications. One of VanSystem's strong points is an agile and dynamic organizational structure which enables direct and constant interaction with customers in order to meet all their requirements and build solid, long-term partnerships. The VanSystem team's professionalism, skill and commitment are at your service to help you achieve the solution you are looking for.

VanSystem's Quality System is qualified according to ISO 9001:2015 and ISO/TS 22163:2017 IRIS Certification™ rules:2017 (International Railway Industry Standard).



SPPC Connectors - Introduction



SPPC-PWL

Single Pole Power Connectors:

Single-pole power connectors are designed to provide safe, reliable and quick connections for cable-to-cable or cable-to-equipment in electrical power distribution systems.

- 5-key polarization system and color coding prevent connection errors
- Up to 750 A, 1.000 V
- From 35 mm² to 300 mm² wire section
- IP67 when mated (according to EN 60529)
- Finger Protected IP2x: male and female contacts
- Multi-louver contact system
- KSPC: keyed single-pole connector, individual keyways to prevent connection errors

-  US Certified (S120 and T4 version)



SPPC-HK

Compact Single Pole Power Connectors:

Single-pole power connectors up to 400 amps, keyed, fingerproof both sides, innovative locking mechanism.

- 5-key polarization system and color coding prevent connection errors
- Up to 400 A, 1.200 V
- From 16 mm² to 120 mm² wire section
- Multi-louver contact system
- Reduced flange size option
- No special tool is required for assembly or uncoupling
- Spring locking axial action
- IP67 when mated (according to EN 60529)
- IP2x finger-protected contacts
- KSPC: keyed single pole connector, individual keyways to prevent connection errors



SPPC LJP

Lug Joint Protector:

LJP is a safe and reliable temporary connection/extension of single core power cables that are pre-terminated with copper lug terminals.

- Up to 780 A, 1.000 V
- IP67 when mated (according to EN 60529)
- Accepts 120 mm², 185 mm², 240 mm² and 300 mm² lugs with holes size 12 mm
- Different lug sizes can be assembled in the same unit using special accessories

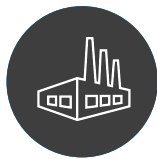
SPPC-PWL Connectors - Introduction

Single Pole Power Connector

Single Pole Power Connectors have become widely adopted in a diverse range of applications and industries.

APPLICATIONS:

- Power distribution
- Utilities
- Electric Vehicles
- Railway Equipment
- Military Field Power
- Mobile Generators
- Loadbanks
- Back-up Power Systems



KEY CHARACTERISTICS:

- 500 Mating Cycles minimum
- Intermateable with other versions
- IP2X Finger Protected contacts
- IP67 sealed when mated
- Remote tool required to release the secondary locking of the mated connectors
- For use with Electrical Power Cables
- Heavy Duty Hand Grips
- Clip retained contacts
- Cotter pin required for panel mount connectors
- Cable sizes from 35mm² to 300mm²
- Facilitate cables up to 37mm Ø
- High Impact Insulators
- Harmonised Colour Coding
- CE Compliant
- EN/ESI compliant Creepage and Clearance distances
- Multi-louver contact system
- Mechanically keyed to prevent connection errors
- Permanent Phase Marking
- Set Screw and Crimp contact versions
- UL94 VO Flame Retardant
- Field Assembly & Repair
- Extraction tool required
- Daisy Chain hook up system

FEATURES AND BENEFITS:

- Connectors coding key to prevent possible wrong connections.
- Mechanical key associated to harmonized colour system i.e. A Phase Line cannot be connected into Earth Line etc. i.e. in Europe Phase 1 is always brown
- secondary locking system



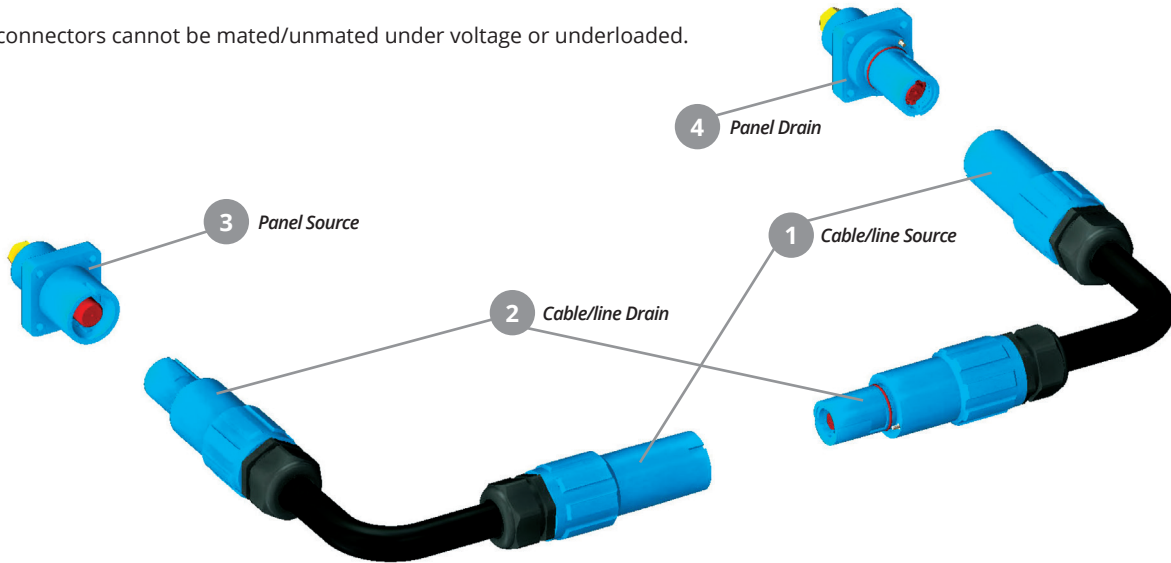
SPPC-PWL Connectors - Introduction

Single Pole Power Connector

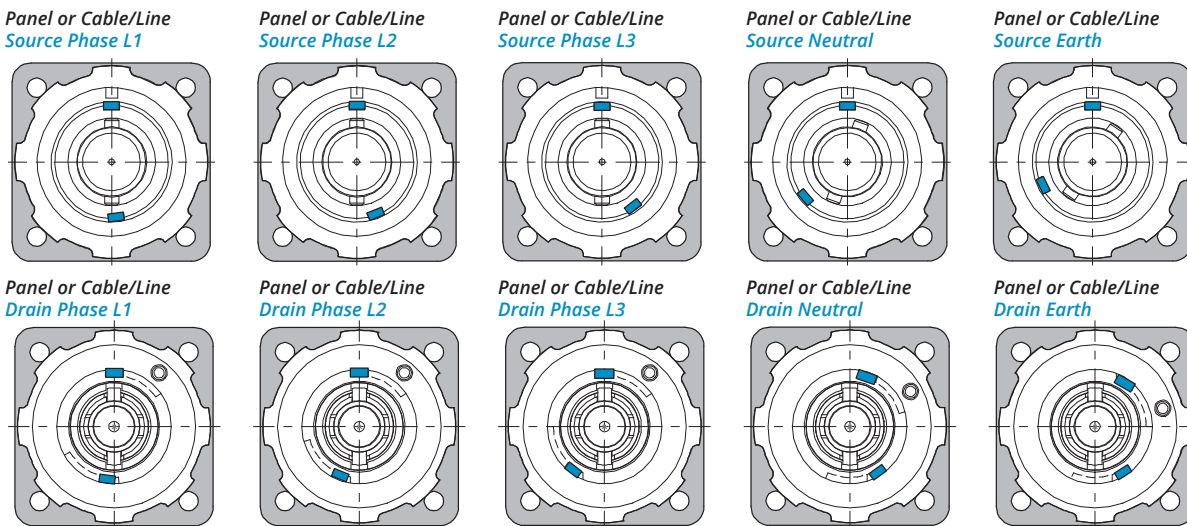
POWER CONNECTORS TYPES:

- **Source: Socket** connector is the source of the power, it receives and holds the Pin connector.
- **Drain: Pin** connectors receives and holds the Socket connector. The Drain connectors have a pin for the secondary locking (locks into the source connectors) The release key is required to unlock the secondary locking pin.
- **Cable/line: source (1) or drain (2)** is a moveable connectors fitted to a cable. The contacts are available in crimp or screw terminal.
- **Panel: source (3) or drain (4)** receptacle connectors to be fixed to a panel.

Power connectors cannot be mated/unmated under voltage or underloaded.



MECHANICALLY KEYED TO PREVENT CONNECTION ERRORS











COLOUR CODING

Standard	Phase L1	Phase L2	Phase L3	Neutral	Earth
Europe	Brown (BR) ●	Black (BK) ●	Grey (GY) ●	Blue (BU) ●	Green (GN) ●
UK (*)	Red (RD) ●	Yellow (YL) ●	Blue (BU) ●	Black (BK) ●	Green (GN) ●
USA (*)	Black (BK) ●	Red (RD) ●	Blue (BU) ●	White (WH) ○	Green (GN) ●
Australia (*)	Red (RD) ●	White (WH) ○	Blue (BU) ●	Black (BK) ●	Green (GN) ●
Direct current DC	-	Red (RD) ●	-	Black (BK) ●	Green (GN) ●

* Color set on request

SPPC-PWL Connectors - Part number explanation

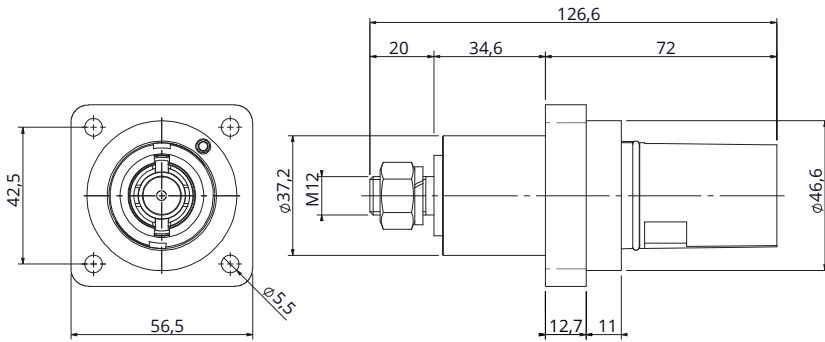


SPPC-PWL	Series Code	SPPC-PWL	Single Pole Power connectors
LS	Connector Type	LS	Cable/Line Source
		LD	Cable/Line Drain
		PS	Panel Source
		PD	Panel Drain
L1	Key Position	E	Earth
		N	Neutral
		L1	Phase 1
		L2	Phase 2
		L3	Phase 3
BR	Insulator Color	BR	 Brown
		BK	 Black
		GY	 Grey
		BU	 Blue
		GN	 Green
		RD	 Red
		YL	 Yellow
		WH	 White
C-240	Contact Termination	M12-T7	M12 Threaded post - 750A
		M12-T4	M12 Threaded post - 400A
		S-120	Screw terminal - 400A up to 120mm ²
		C-185	Crimp contacts - 750A 180mm ²
		C-240	Crimp contacts - 750A 240mm ²
		C-300	Crimp contacts - 750A 300mm ²
		TH7	Threaded hole - 750A
		TH4	Threaded hole - 400A
M	Cable External diameter	ES	7mm - 15mm
		S	15mm - 23mm
		M	19mm - 28mm
		OS	22mm - 32mm
		OS-M50	33mm - 37mm
BM	Contacts Type	-	Standard contacts
		BM	Bimetallic Contacts
 	Customization		

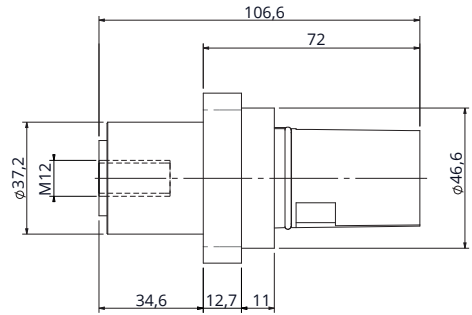
P/N Sample: SPPC-PWL-LS-L1-BR-C-240-M

SPPC-PWL Connectors - Dimensions

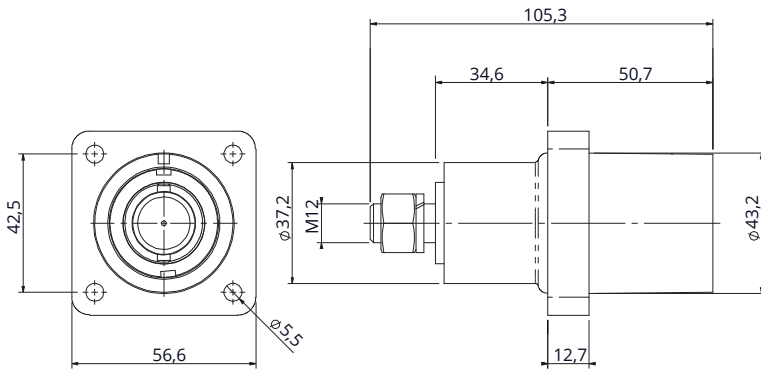
Panel Drain Connectors
M12 Threaded post for conductor



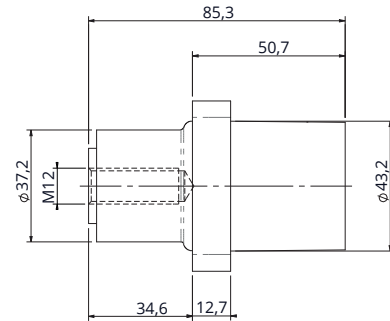
Panel Drain Connectors
Threaded Hole



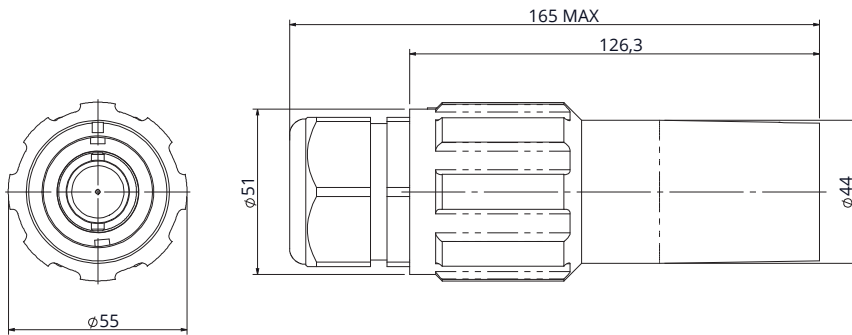
Panel Source Connectors
M12 Threaded post for conductor



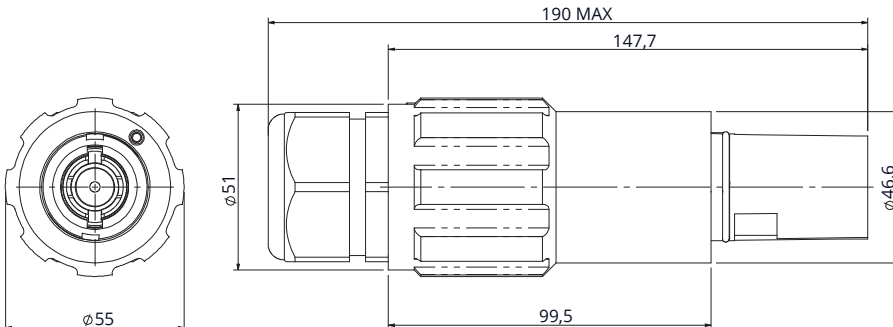
Panel Source Connectors
Threaded Hole



Cable/Line Source Connectors



Cable/Line Drain Connectors








SPPC-PWL Connectors - Panel drain - 1000V




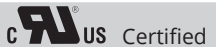



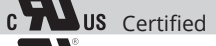



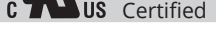
750A

M12 Threaded post for conductor up to 300mm²

Color*	Designation	Order Number
 Brown – Phase L1	SPPC-PWL-PD-L1-BR-M12-T7	VS390110
 Black – Phase L2	SPPC-PWL-PD-L2-BK-M12-T7	VS390111
 Grey – Phase L3	SPPC-PWL-PD-L3-GY-M12-T7	VS390112
 Blue – Neutral	SPPC-PWL-PD-N-BU-M12-T7	VS390113
 Green – Earth	SPPC-PWL-PD-E-GN-M12-T7	VS390109






400A

M12 Threaded post for conductor up to 120mm²

Color*	Designation	Order Number	
 Brown – Phase L1	SPPC-PWL-PD-L1-BR-M12-T4	VS390070	
 Black – Phase L2	SPPC-PWL-PD-L2-BK-M12-T4	VS390071	
 Grey – Phase L3	SPPC-PWL-PD-L3-GY-M12-T4	VS390072	
 Blue – Neutral	SPPC-PWL-PD-N-BU-M12-T4	VS390068	
 Green – Earth	SPPC-PWL-PD-E-GN-M12-T4	VS390263	






750A

Threaded Hole

Color*	Designation	Order Number
 Brown – Phase L1	SPPC-PWL-PD-L1-BR-TH7	VS390280
 Black – Phase L2	SPPC-PWL-PD-L2-BK-TH7	VS390281
 Grey – Phase L3	SPPC-PWL-PD-L3-GY-TH7	VS390282
 Blue – Neutral	SPPC-PWL-PD-N-BU-TH7	VS390283
 Green – Earth	SPPC-PWL-PD-E-GN-TH7	VS390284

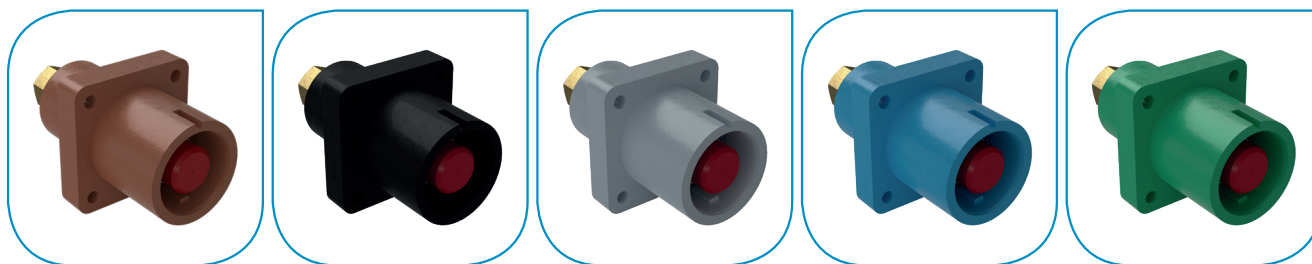
400A

Threaded Hole

Color*	Designation	Order Number
 Brown – Phase L1	SPPC-PWL-PD-L1-BR-TH4	VS390285
 Black – Phase L2	SPPC-PWL-PD-L2-BK-TH4	VS390286
 Grey – Phase L3	SPPC-PWL-PD-L3-GY-TH4	VS390287
 Blue – Neutral	SPPC-PWL-PD-N-BU-TH4	VS390288
 Green – Earth	SPPC-PWL-PD-E-GN-TH4	VS390289

*European Harmonized Color Set, others colors set on request

SPPC-PWL Connectors - Panel source - 1000V



750A

M12 Threaded post for conductor up to 300mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-PWL-PS-L1-BR-M12-T7	VS390100
Black - Phase L2	SPPC-PWL-PS-L2-BK-M12-T7	VS390101
Grey - Phase L3	SPPC-PWL-PS-L3-GY-M12-T7	VS390102
Blue - Neutral	SPPC-PWL-PS-N-BU-M12-T7	VS399000
Green - Earth	SPPC-PWL-PS-E-GN-M12-T7	VS399004

400A

M12 Threaded post for conductor up to 120mm²

Color*	Designation	Order Number	
Brown - Phase L1	SPPC-PWL-PS-L1-BR-M12-T4	VS390065	Certified
Black - Phase L2	SPPC-PWL-PS-L2-BK-M12-T4	VS390132	Certified
Grey - Phase L3	SPPC-PWL-PS-L3-GY-M12-T4	VS390067	Certified
Blue - Neutral	SPPC-PWL-PS-N-BU-M12-T4	VS390063	Certified
Green - Earth	SPPC-PWL-PS-E-GN-M12-T4	VS390064	Certified

750A

Threaded Hole

Color*	Designation	Order Number
Brown - Phase L1	SPPC-PWL-PS-L1-BR-TH7	VS390290
Black - Phase L2	SPPC-PWL-PS-L2-BK-TH7	VS390291
Grey - Phase L3	SPPC-PWL-PS-L3-GY-TH7	VS390292
Blue - Neutral	SPPC-PWL-PS-N-BU-TH7	VS390293
Green - Earth	SPPC-PWL-PS-E-GN-TH7	VS390294

400A

Threaded Hole

Color*	Designation	Order Number
Brown - Phase L1	SPPC-PWL-PS-L1-BR-TH4	VS390295
Black - Phase L2	SPPC-PWL-PS-L2-BK-TH4	VS390296
Grey - Phase L3	SPPC-PWL-PS-L3-GY-TH4	VS390297
Blue - Neutral	SPPC-PWL-PS-N-BU-TH4	VS390298
Green - Earth	SPPC-PWL-PS-E-GN-TH4	VS390299


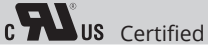



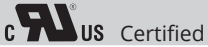



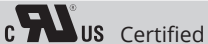
*European Harmonized Color Set, others colors set on request

SPPC-PWL Connectors - Cable/Line drain - 1000V



400A






Screws terminal for conductor up to 120mm²**

Color*	Designation	Order Number	
 Brown - Phase L1	SPPC-PWL-LD-L1-BR-S-120-M	VS390091	
 Black - Phase L2	SPPC-PWL-LD-L2-BK-S-120-M	VS390092	
 Grey - Phase L3	SPPC-PWL-LD-L3-GY-S-120-M	VS390093	
 Blue - Neutral	SPPC-PWL-LD-N-BU-S-120-M	VS390090	
 Green - Earth	SPPC-PWL-LD-E-GN-S-120-M	VS390089	

750A






Crimp contacts 300mm²

** Sleeves included, for cable conductor size 35 mm² - 50 mm² - 70 mm² - 95 mm² - 120 mm²

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-PWL-LD-L1-BR-C-300-OS	VS390275
 Black - Phase L2	SPPC-PWL-LD-L2-BK-C-300-OS	VS390276
 Grey - Phase L3	SPPC-PWL-LD-L3-GY-C-300-OS	VS390277
 Blue - Neutral	SPPC-PWL-LD-N-BU-C-300-OS	VS390278
 Green - Earth	SPPC-PWL-LD-E-GN-C-300-OS	VS390279






750A

Crimp contacts 240mm²

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-PWL-LD-L1-BR-C-240-OS	VS390105
 Black - Phase L2	SPPC-PWL-LD-L2-BK-C-240-OS	VS390106
 Grey - Phase L3	SPPC-PWL-LD-L3-GY-C-240-OS	VS390107
 Blue - Neutral	SPPC-PWL-LD-N-BU-C-240-OS	VS390274
 Green - Earth	SPPC-PWL-LD-E-GN-C-240-OS	VS390104

750A

Crimp contacts 185mm²

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-PWL-LD-L1-BR-C-185-OS	VS390126
 Black - Phase L2	SPPC-PWL-LD-L2-BK-C-185-OS	VS390127
 Grey - Phase L3	SPPC-PWL-LD-L3-GY-C-185-OS	VS390128
 Blue - Neutral	SPPC-PWL-LD-N-BU-C-185-OS	VS390130
 Green - Earth	SPPC-PWL-LD-E-GN-C-185-OS	VS390129

*European Harmonized Color Set, others colors set on request

SPPC-PWL Connectors - Cable/Line source - 1000V



400A

Screws terminal for conductor up to 120mm²**

Color*	Designation	Order Number	
Brown - Phase L1	SPPC-PWL-LS-L1-BR-S-120-M	VS390086	US Certified
Black - Phase L2	SPPC-PWL-LS-L2-BK-S-120-M	VS390087	US Certified
Grey - Phase L3	SPPC-PWL-LS-L3-GY-S-120-M	VS390088	US Certified
Blue - Neutral	SPPC-PWL-LS-N-BU-S-120-M	VS390085	US Certified
Green - Earth	SPPC-PWL-LS-E-GN-S-120-M	VS390084	US Certified

750A

Crimp contacts 300mm²

** Sleeves included, for cable conductor size 35 mm² - 50 mm² - 70 mm² - 95 mm² - 120 mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-PWL-LS-L1-BR-C-300-OS	VS390197
Black - Phase L2	SPPC-PWL-LS-L2-BK-C-300-OS	VS390198
Grey - Phase L3	SPPC-PWL-LS-L3-GY-C-300-OS	VS390199
Blue - Neutral	SPPC-PWL-LS-N-BU-C-300-OS	VS390300
Green - Earth	SPPC-PWL-LS-E-GN-C-300-OS	VS390196

750A

Crimp contacts 240mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-PWL-LS-L1-BR-C-240-OS	VS390115
Black - Phase L2	SPPC-PWL-LS-L2-BK-C-240-OS	VS390116
Grey - Phase L3	SPPC-PWL-LS-L3-GY-C-240-OS	VS390117
Blue - Neutral	SPPC-PWL-LS-N-BU-C-240-OS	VS390118
Green - Earth	SPPC-PWL-LS-E-GN-C-240-OS	VS390114

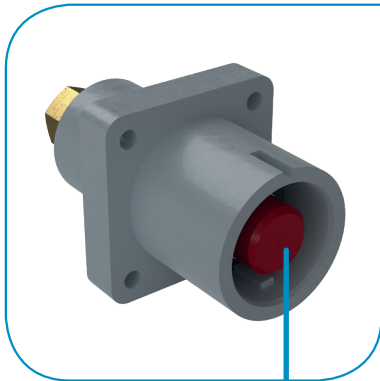
750A

Crimp contacts 185mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-PWL-LS-L1-BR-C-185-OS	VS390235
Black - Phase L2	SPPC-PWL-LS-L2-BK-C-185-OS	VS390154
Grey - Phase L3	SPPC-PWL-LS-L3-GY-C-185-OS	VS390155
Blue - Neutral	SPPC-PWL-LS-N-BU-C-185-OS	VS390225
Green - Earth	SPPC-PWL-LS-E-GN-C-185-OS	VS390226






*European Harmonized Color Set, others colors set on request

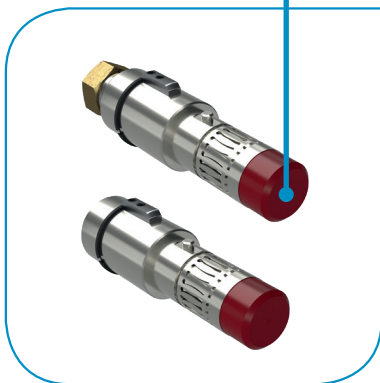
SPPC-PWL Connectors - Panel Connectors - 1000V



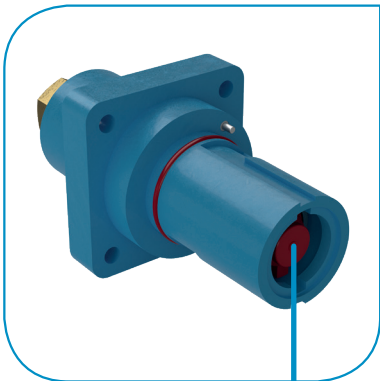
Panel Source Connectors

contacts and panel gasket to be order separately

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-PWL-PS-ISOL-L1-BR	VS392101
 Black - Phase L2	SPPC-PWL-PS-ISOL-L2-BK	VS392102
 Grey - Phase L3	SPPC-PWL-PS-ISOL-L3-GY	VS392103
 Blue - Neutral	SPPC-PWL-PS-ISOL-N-BU	VS392104
 Green - Earth	SPPC-PWL-PS-ISOL-E-GN	VS392105








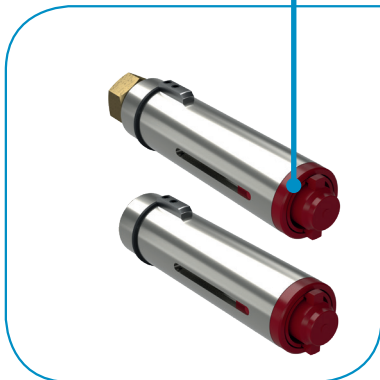
Type	Designation	Order Number
Source - M12 Threaded post - 750A	SPPC-PWL-PS-CONT-M12-750A	VS392201
Source - M12 Threaded post - 400A	SPPC-PWL-PS-CONT-M12-400A	VS392203
Source - Threaded Hole - 750A	SPPC-PWL-PS-CONT-TH-750A	VS392205
Source - Threaded Hole - 400A	SPPC-PWL-PS-CONT-TH-400A	VS392207



Panel Drain Connectors

contacts and panel gasket to be order separately

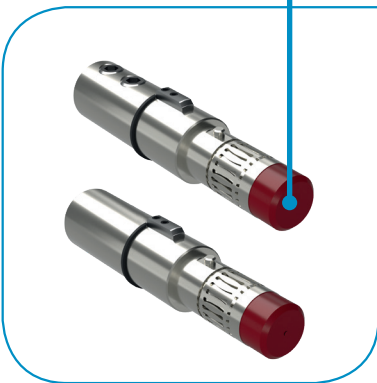
Color*	Designation	Order Number
 Brown - Phase L1	SPPC-PWL-PD-ISOL-L1-BR	VS392106
 Black - Phase L2	SPPC-PWL-PD-ISOL-L2-BK	VS392107
 Grey - Phase L3	SPPC-PWL-PD-ISOL-L3-GY	VS392108
 Blue - Neutral	SPPC-PWL-PD-ISOL-N-BU	VS392109
 Green - Earth	SPPC-PWL-PD-ISOL-E-GN	VS392110



Type	Designation	Order Number
Drain - M12 Threaded post - 750A	SPPC-PWL-PD-CONT-M12-750A	VS392202
Drain - M12 Threaded post - 400A	SPPC-PWL-PD-CONT-M12-400A	VS392204
Drain - Threaded Hole - 750A	SPPC-PWL-PD-CONT-TH-750A	VS392206
Drain - Threaded Hole - 400A	SPPC-PWL-PD-CONT-TH-400A	VS392208






*European Harmonized Color Set, others colors set on request

SPPC-PWL Connectors - Cable/Line Connectors - 1000V

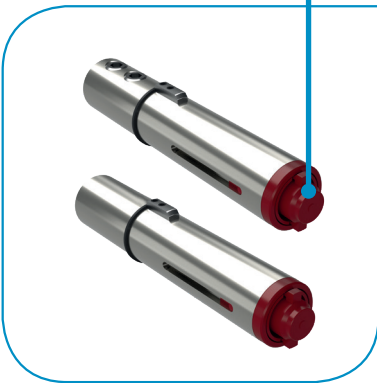


Cable/Line Source Connectors

contacts to be order separately






Color*	Designation	Order Number
 Brown - Phase L1	SPPC-PWL-LS-ISOL-L1-BR	VS392111
 Black - Phase L2	SPPC-PWL-LS-ISOL-L2-BK	VS392112
 Grey - Phase L3	SPPC-PWL-LS-ISOL-L3-GY	VS392113
 Blue - Neutral	SPPC-PWL-LS-ISOL-N-BU	VS392114
 Green - Earth	SPPC-PWL-LS-ISOL-E-GN	VS392115

Type	Designation	Order Number
Source - Screw up to 35mm ² -120mm ² ** - 400A	SPPC-PWL-LS-CONT-S-400A	VS392209
Source - Crimp contacts 185 mm ² - 750A	SPPC-PWL-LS-CONT-CRIMP.185-750A	VS392211
Source - Crimp contacts 240 mm ² - 750A	SPPC-PWL-LS-CONT-CRIMP.240-750A	VS392213
Source - Crimp contacts 300 mm ² - 750A	SPPC-PWL-LS-CONT-CRIMP.300-750A	VS392215



Cable/Line Drain Connectors

contacts to be order separately

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-PWL-LD-ISOL-L1-BR	VS392116
 Black - Phase L2	SPPC-PWL-LD-ISOL-L2-BK	VS392117
 Grey - Phase L3	SPPC-PWL-LD-ISOL-L3-GY	VS392118
 Blue - Neutral	SPPC-PWL-LD-ISOL-N-BU	VS392119
 Green - Earth	SPPC-PWL-LD-ISOL-E-GN	VS392120

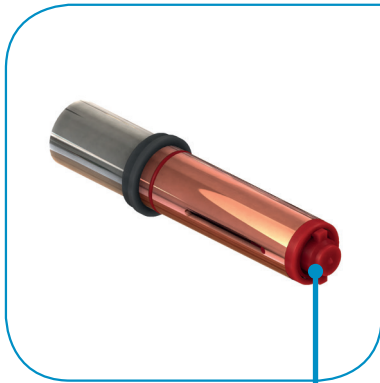
Type	Designation	Order Number
Drain - Screw up to 35mm ² -120mm ² ** - 400A	SPPC-PWL-LD-CONT-S-400A	VS392210
Drain - Crimp contacts 185 mm ² - 750A	SPPC-PWL-LD-CONT-CRIMP.185-750A	VS392212
Drain - Crimp contacts 240 mm ² - 750A	SPPC-PWL-LD-CONT-CRIMP.240-750A	VS392214
Drain - Crimp contacts 300 mm ² - 750A	SPPC-PWL-LD-CONT-CRIMP.300-750A	VS392216

** Sleeves included, for cable conductor size 35 mm² - 50 mm² - 70 mm² - 95 mm² - 120 mm²
*European Harmonized Color Set, others colors set on request






SPPC-PWL Connectors - Cable/Line drain - 1000V - 500A

BIMETALLIC CONNECTORS FOR ALUMINIUM CABLES

For crimping tool and crimping die, please consult our commercial office.





Crimp contacts 300mm², cable external diameter 33mm – 37mm






Color*	Designation	Order Number
	Brown - Phase L1 SPPC-PWL-LD-L1-BR-C-300-OS-M50-BM	VS390432
	Black - Phase L2 SPPC-PWL-LD-L2-BK-C-300-OS-M50-BM	VS390433
	Grey - Phase L3 SPPC-PWL-LD-L3-GY-C-300-OS-M50-BM	VS390434
	Blue - Neutral SPPC-PWL-LD-N-BU-C-300-OS-M50-BM	VS390431
	Green - Earth SPPC-PWL-LD-E-GN-C-300-OS-M50-BM	VS390430

Crimp contacts 240mm², cable external diameter 33mm – 37mm**

** on request version OS-BM with cable external diameter 22mm – 32mm

Color*	Designation	Order Number
	Brown - Phase L1 SPPC-PWL-LD-L1-BR-C-240-OS-M50-BM	VS390422
	Black - Phase L2 SPPC-PWL-LD-L2-BK-C-240-OS-M50-BM	VS390423
	Grey - Phase L3 SPPC-PWL-LD-L3-GY-C-240-OS-M50-BM	VS390424
	Blue - Neutral SPPC-PWL-LD-N-BU-C-240-OS-M50-BM	VS390421
	Green - Earth SPPC-PWL-LD-E-GN-C-240-OS-M50-BM	VS390420

Crimp contacts 185mm², cable external diameter 22mm – 32mm

Color*	Designation	Order Number
	Brown - Phase L1 SPPC-PWL-LD-L1-BR-C-185-OS-BM	VS390402
	Black - Phase L2 SPPC-PWL-LD-L2-BK-C-185-OS-BM	VS390403
	Grey - Phase L3 SPPC-PWL-LD-L3-GY-C-185-OS-BM	VS390404
	Blue - Neutral SPPC-PWL-LD-N-BU-C-185-OS-BM	VS390401
	Green - Earth SPPC-PWL-LD-E-GN-C-185-OS -BM	VS390400

*European Harmonized Color Set, others colors set on request






SPPC-PWL Connectors - Cable/Line source - 1000V - 500A

BIMETALLIC CONNECTORS FOR ALUMINIUM CABLES

For crimping tool and crimping die, please consult our commercial office.



Crimp contacts 300mm², cable external diameter 33mm – 37mm






Color*	Designation	Order Number
 Brown – Phase L1	SPPC-PWL-LS-L1-BR-C-300-OS-M50-BM	VS390437
 Black – Phase L2	SPPC-PWL-LS-L2-BK-C-300-OS-M50-BM	VS390438
 Grey – Phase L3	SPPC-PWL-LS-L3-GY-C-300-OS-M50-BM	VS390439
 Blue – Neutral	SPPC-PWL-LS-N-BU-C-300-OS-M50-BM	VS390436
 Green – Earth	SPPC-PWL-LS-E-GN-C-300-OS-M50-BM	VS390435

Crimp contacts 240mm², cable external diameter 33mm – 37mm**

** on request version OS-BM with cable external diameter 22mm – 32mm

Color*	Designation	Order Number
 Brown – Phase L1	SPPC-PWL-LS-L1-BR-C-240-OS-M50-BM	VS390427
 Black – Phase L2	SPPC-PWL-LS-L2-BK-C-240-OS-M50-BM	VS390428
 Grey – Phase L3	SPPC-PWL-LS-L3-GY-C-240-OS-M50-BM	VS390429
 Blue – Neutral	SPPC-PWL-LS-N-BU-C-240-OS-M50-BM	VS390426
 Green – Earth	SPPC-PWL-LS-E-GN-C-240-OS-M50-BM	VS390425

Crimp contacts 185mm², cable external diameter 22mm – 32mm

Color*	Designation	Order Number
 Brown – Phase L1	SPPC-PWL-LS-L1-BR-C-185-OS-BM	VS390407
 Black – Phase L2	SPPC-PWL-LS-L2-BK-C-185-OS-BM	VS390408
 Grey – Phase L3	SPPC-PWL-LS-L3-GY-C-185-OS-BM	VS390409
 Blue – Neutral	SPPC-PWL-LS-N-BU-C-185-OS-BM	VS390406
 Green – Earth	SPPC-PWL-LS-E-GN-C-185-OS-BM	VS390405

*European Harmonized Color Set, others colors set on request

SPPC-PWL Connectors - Crimping Tool

It is recommended to apply multiple crimp compressions in accordance with the above table to obtain optimum mechanical and electrical performance. The correct sequence of compressions is shown in Fig.2.

Use the following tool:

- Hand operated crimp tool: HT131-C
- Cordless Hydraulic Crimp Tool: B131-C

Due to the numerous cable types available, it is recommended to contact our Customer Service to confirm cable & crimp suitability.

Cable Size	Up to	185mm ²	240mm ²	300mm ²	185mm ²	240mm ²	300mm ²
	120mm ²	Class 2	Class 2	Class 2	Class 5	Class 5	Class 5
Insulation Strip (dim L)	33mm	40mm	40mm	40mm	40mm	40mm	40mm
Recommended Number of Crimps	N/A (set screw)	2	3	3	2	3	3
Hand Operated Crimp Tool	N/A	HT131-C	HT131-C	HT131-C	HT120	HT120	HT120
Crimp Die Set	N/A	ME48-C	ME60-C	ME60-C	ME48-C	ME60-C	ME60-C
Contact Removal Tool	VS390038	VS390039	VS390039	VS390039	VS390039	VS390039	VS390039

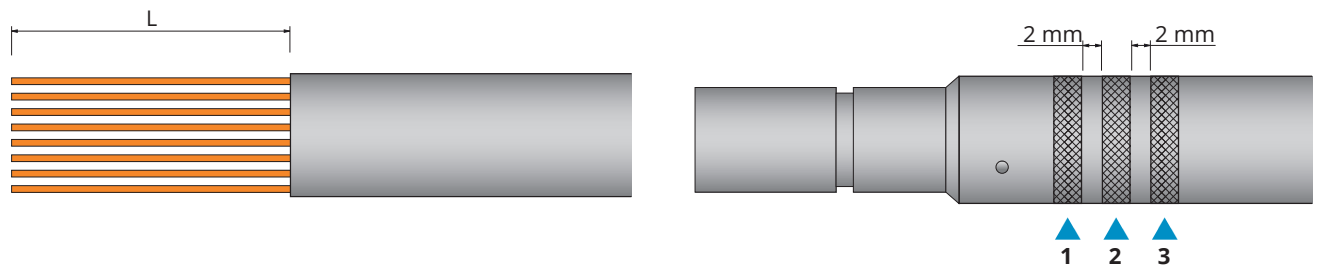


Fig.2

Bimetallic contacts

Cable Size	Up to	185mm ²	240mm ²	300mm ²	185mm ²	240mm ²	300mm ²
	120mm ²	Class 2	Class 2	Class 2	Class 5	Class 5	Class 5
Hand Operated Crimp Tool	-	-	-	-	HT120	ECW-H3D*	ECW-H3D*
Crimp Die Set	-	-	-	-	ME60-C	MK32-3D	MK32-3D

* For the its operation it is necessary to combine it to a hydraulic pump



Hydraulic pump ECW-H3D

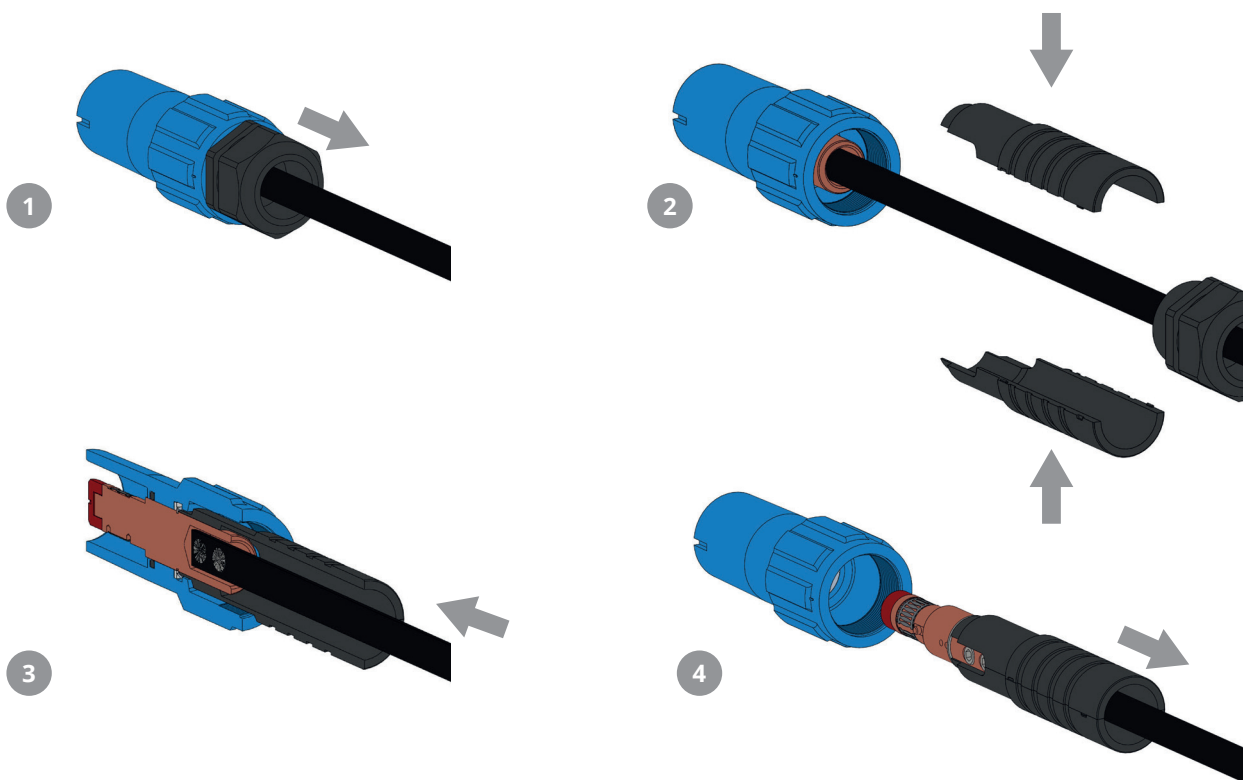


Hand Operated Crimp Tool HT131-C

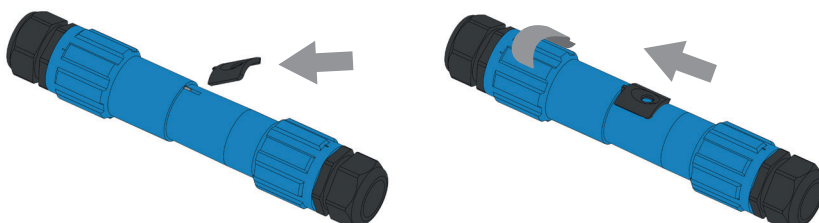
SPPC-PWL Connectors - Removal Tool



Type	Designation	Order Number
Screw set termination	SPPC-PWL-RT-25-120	VS390038
Crimp contacts	SPPC-PWL-RT-185-300	VS390039



Type	Designation	Order Number
Release Key	SPPC-PWL-KEY	VS392309



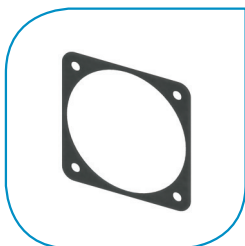
SPPC-PWL Connectors - Accessories



Cable Gland - for Cable/Line Connectors

Type	Designation	Order Number
M40 threaded (19mm-28mm)	SPPC-PWL-M40	VS392301
M40 threaded (22mm-32mm)	SPPC-PWL-M40-A	VS392302
M50 threaded* (33mm-37mm)	SPPC-PWL-LS-M50	-

* To be ordered with cable/line connectors only



Panel Gasket

Type	Designation	Order Number
Neoprene Gaskets	SPPC-PWL-PG	VS392308



Sleeve For Screw Contacts

Type	Designation	Order Number
Sleeve**	SPPC-PWL-SLEEVE	VS392312

** Sleeves for cable conductor size 35 mm² - 50 mm² - 70 mm² - 95 mm² - 120 mm²



Environmental Locking Caps

Type	Designation	Order Number
Panel SOURCE	SPPC-PWL-PS-CAP	VS392304
Panel DRAIN	SPPC-PWL-PD-CAP	VS392305
Inline SOURCE	SPPC-PWL-LS-CAP	VS392306
Inline DRAIN	SPPC-PWL-LD-CAP	VS392307



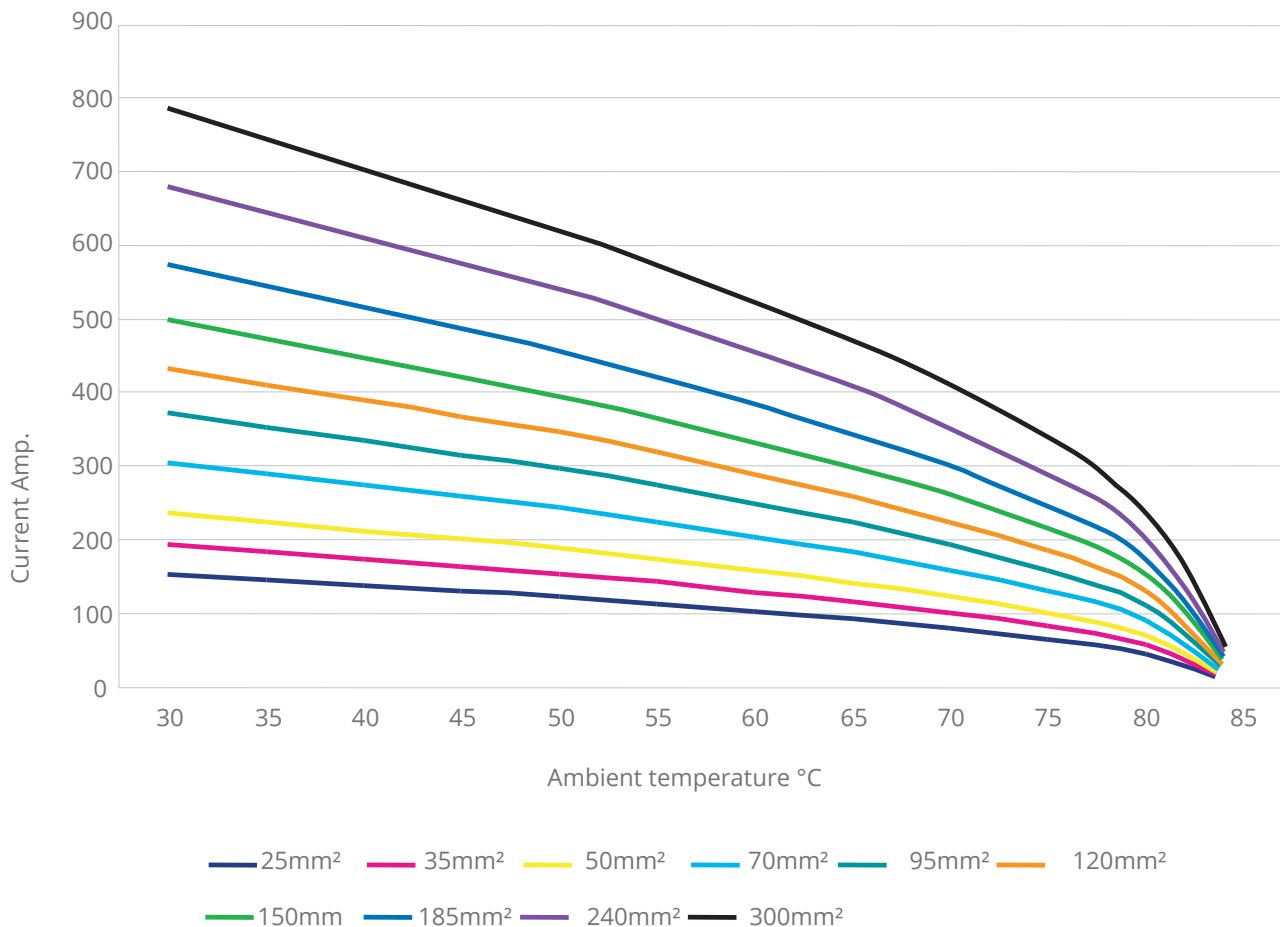
Dust Caps (on request)

Type	Designation	Order Number
Source	SPPC-PWL-PS-LS DUST CAP	VS392313
Drain	SPPC-PWL-PD-LD DUST CAP	VS392314



SPPC-PWL Connectors

Derating data for 85°C rubber insulated cables



Characteristics

Screws Tightening Torque (in-line connectors)	12Nm
Panel Contact Tightening Torque	30Nm max
Cable Gland Tightening Torque	13Nm
Minimum Mating Cycles	500
Contact Retention in Insulator	2.5kN Axial Load
Flammability	UL94 V0
Environmental Sealing (when mated)	IP67
Rated Voltage to Earth	2000Vac
Minimum Flashover (EN60309-1)	6.8kV AC - 1 minute
Minimum Insulation Resistance	5GΩ @ 500V
Operating Voltage	1000V AC or DC
Test Voltage (Mated Condition)	5 kV- 1 minute @ 50Hz
Contact Resistance	<0.1mΩ
Short Circuit Current - 1 second	16kA
Short Circuit Current - 3 seconds	12kA
Surge Current (DIN VDE 0102/1.90)	62kA - 10mseconds
Creepage Distance	>25mm
Clearance Distance	>25mm
Temperature Range	-30°C / +125°C

SPPC-HK Connectors - Introduction

Single Pole Power Connector up to 400A



HOOK series offers new opportunities of using the electrical connection even in applications where in the past this was not possible due to low cost requirements and without renouncing to a complete range of features concerning robustness, reliability and safety.

APPLICATIONS:

- Power distribution
- Utilities
- Electric Vehicles
- Railway Equipment
- Military Field Power
- Mobile Generators
- Loadbanks
- Back-up Power Systems



KEY CHARACTERISTICS

- brass contacts for current up to 250A and cable section from 16 to 70 mm² or from 4 to 2/0AWG
- copper contacts for current up to 400A and cable section from 95 to 120 mm² or for 4/0AWG
- 500 mating cycles minimum
- IP67 sealed when mated
- EN/ESI compliant creepage and clearance distances
- UL 94V0 flame retardant insulating material
- EN/CE compliant metric cable glands
- Cable sizes from 16 to 120 mm² or from 4 to 4/0 AWG
- Set screw and crimp contact versions
- Multi-louver contact version
- CE compliant

Drain cable connectors are typically used as the live or supply side of the circuit. They are finger protected in the un-mated condition to meet the requirements IP2X. They protect the user from accidental contact with any live elements.

Source cable connectors are typically used as the load side of the circuit.

The cable connectors are either available:

- With set screw terminal (with or without crimping sleeves) for cable section from 16 to 70 mm² or from 4 to 2/0AWG
- With crimp termination for cable sections up to 120 mm² or for 4/0AWG

A plastic water tight strain relief is supplied to provide IP67 sealing.

Drain panel connector are typically used as the live or supply side of the circuit. They are finger protected in the un-mated condition to meet the requirements IP2X.

Source panel connectors are typically used as the load side of the circuit.

Panel connectors can be either front or rear mounted on equipment while maintaining EN/ESI creepage and clearance distances, and are supplied in brass material (up to 250A) or in copper material (up to 400A) versions. These connectors have M12 threaded post termination and are supplied with pre-installed contacts.

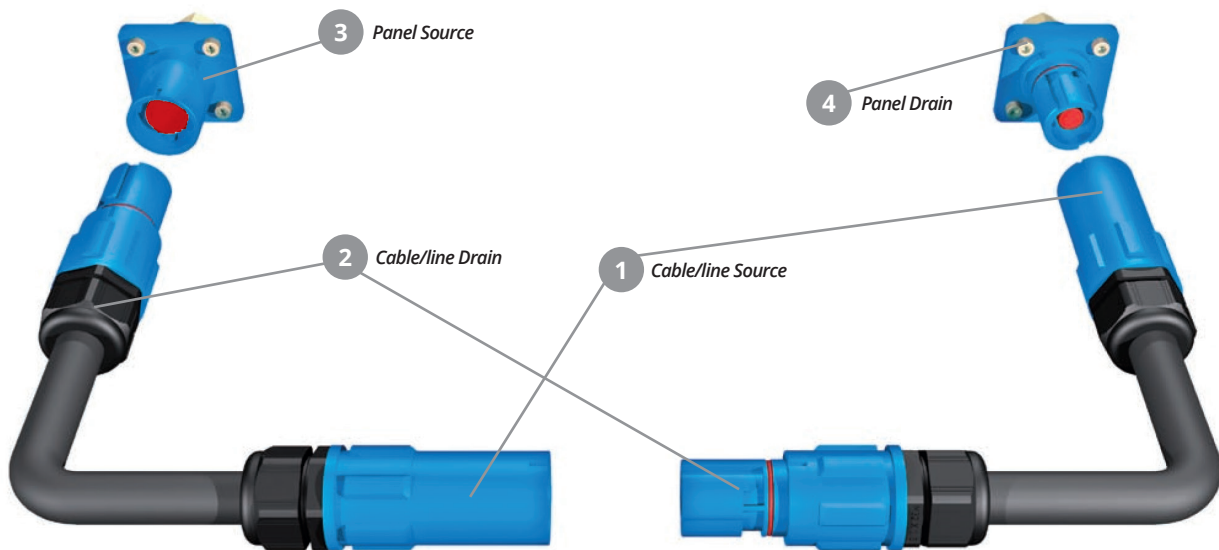
SPPC-HK Connectors - Introduction

Single Pole Power Connector up to 400A

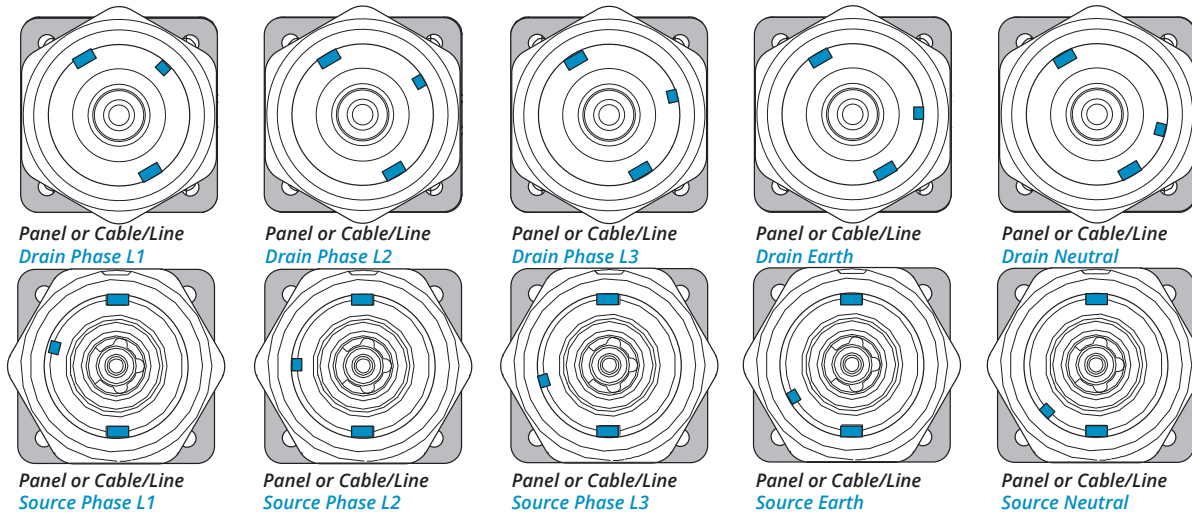
POWER CONNECTORS TYPES:

- **Source: Socket** connector is the source of the power, it receives and holds the Pin connector.
- **Drain: Pin** connectors receives and holds the Socket connector.
- **Cable/line: source (1) or drain (2)** is a moveable connectors fitted to a cable. The contacts are available in crimp or screw terminal.
- **Panel: source (3) or drain (4)** receptacle connectors to be fixed to a panel.
























Power connectors cannot be mated/unmated under voltage or underloaded.



MECHANICALLY KEYED TO PREVENT CONNECTION ERRORS











COLOUR CODING.

Standard	Phase L1	Phase L2	Phase L3	Earth	Neutral
Europe	Brown (BR) 	Black (BK) 	Grey (GY) 	Green (GN) 	Blue (BU) 
UK (*)	Red (RD) 	Yellow (YL) 	Blue (BU) 	Green (GN) 	Black (BK) 
USA (*)	Black (BK) 	Red (RD) 	Blue (BU) 	Green (GN) 	White (WH) 
Australia (*)	Red (RD) 	White (WH) 	Blue (BU) 	Green (GN) 	Black (BK) 
Direct current DC	-	Red (RD) 	-	Green (GN) 	Black (BK) 

* Color set on request

SPPC-HK Connectors - Part number explanation



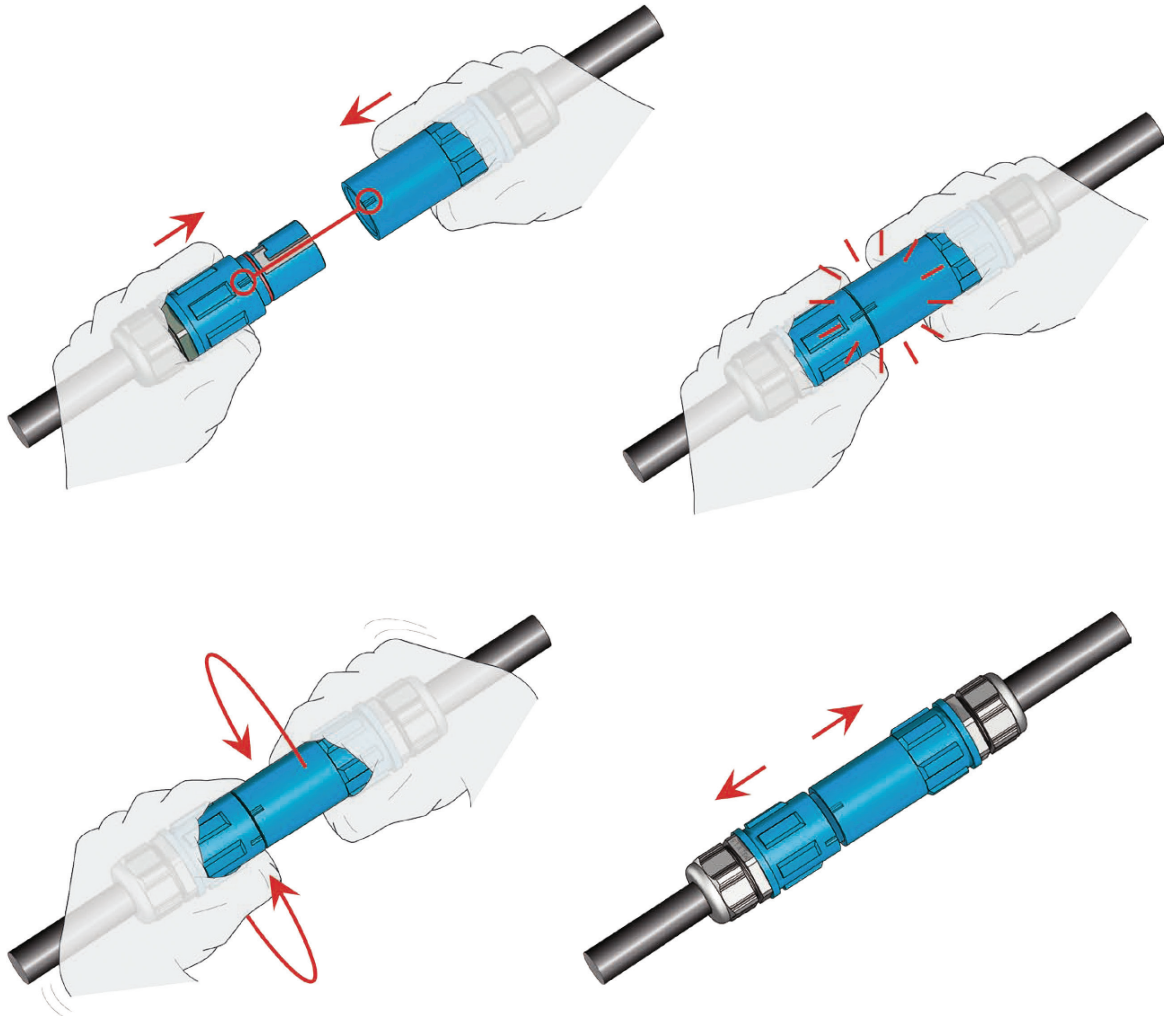
SPPC-HK	Series Code	SPPC-HK	Single Pole Power Connectors
LS	Connector Type	LS	Cable/Line Source
		LD	Cable/Line Drain
		PS	Panel Source
		PD	Panel Drain
L1	Key Position	E	Earth
		N	Neutral
		L1	Phase 1
		L2	Phase 2
BR	Insulator Color	L3	Phase 3
		BR	 Brown
		BK	 Black
		GY	 Grey
		BU	 Blue
		GN	 Green
		RD	 Red
C-240	Contact Termination	YL	 Yellow
		WH	 White
		M12-T2	M12 Threaded post - 250A
		M12-T4	M12 Threaded post - 400A
M	Cable External diameter	S-70	Screw terminal - 250A up to 70mm ²
		C-120	Crimp contacts - 400A 95mm ² - 120mm ²
		S	7mm - 15mm
	Customization	M	11mm - 21mm
		OS	15mm - 25mm

P/N Sample: SPPC-HK-LS-L1-BR-C-120-M

SPPC-HK Connectors - Introduction

Hook Mating System: a faster and more reliable connection

- Position major key alignment arrows
- Firmly push the Pin and Socket connectors together
- Rotate the Pin and Socket connectors in opposite direction until the padlock symbol is in alignment with the arrow symbol
- Release the connectors and they spring into the locked position.
- To unlock, push the connectors firmly together, rotate in opposite directions and pull apart



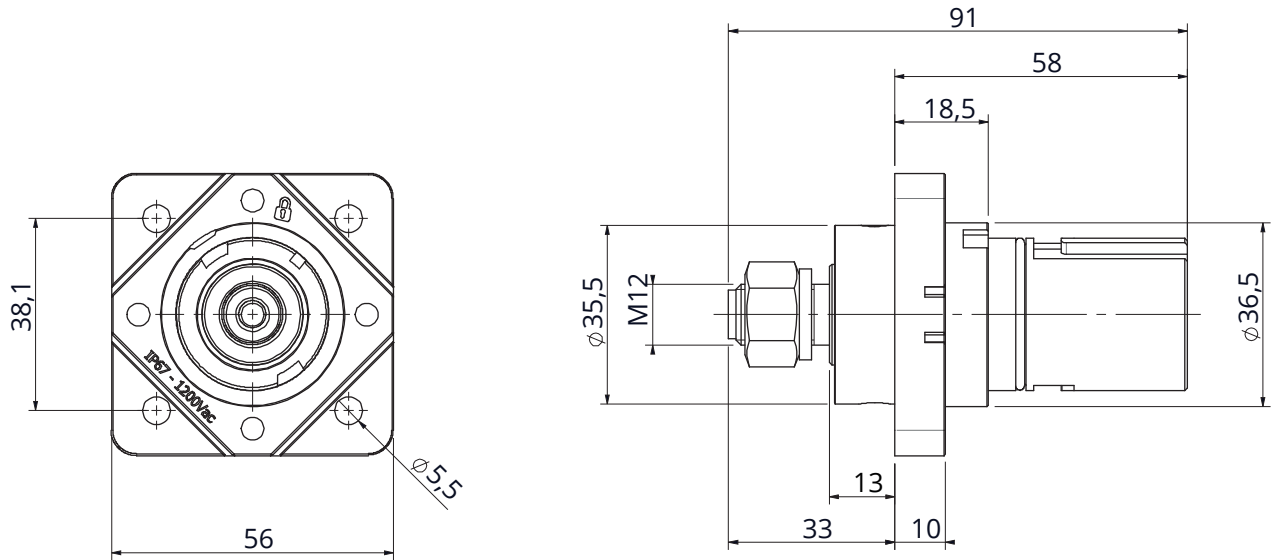
Unwanted uncoupling prevention: a simple cable tie makes the system safer.

The connectors can only be separated by removing it with a suitable tool.

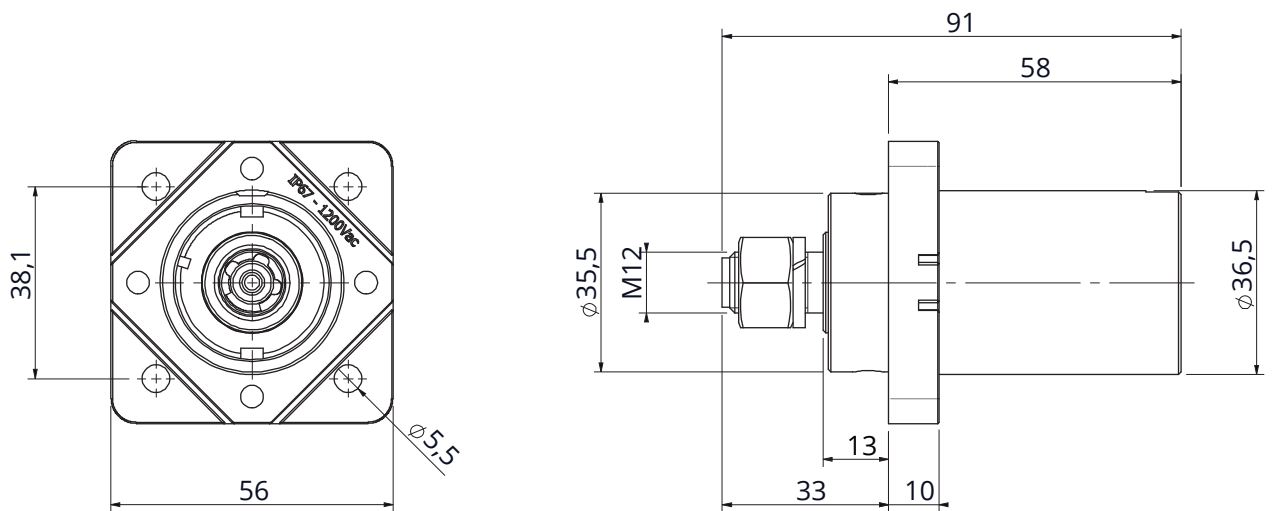


SPPC-HK Connectors - Dimensions

Panel Drain Connectors

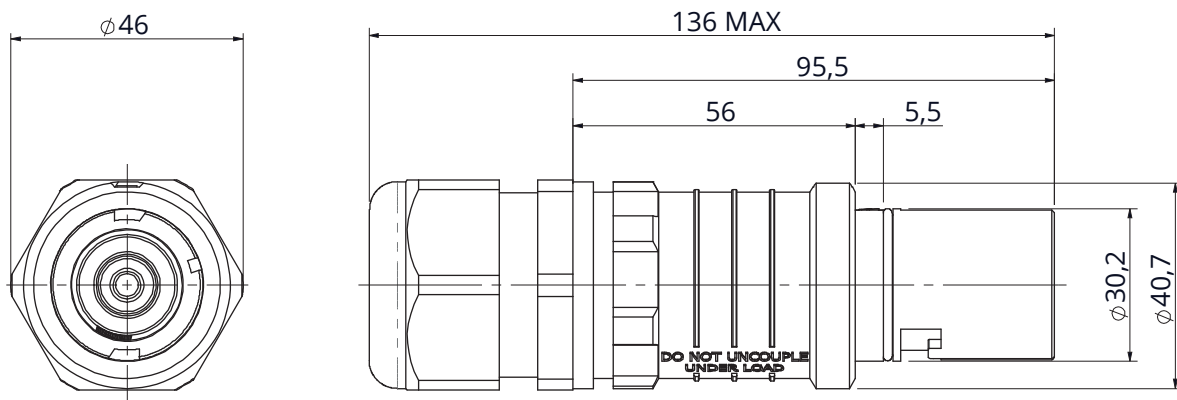


Panel Source Connectors

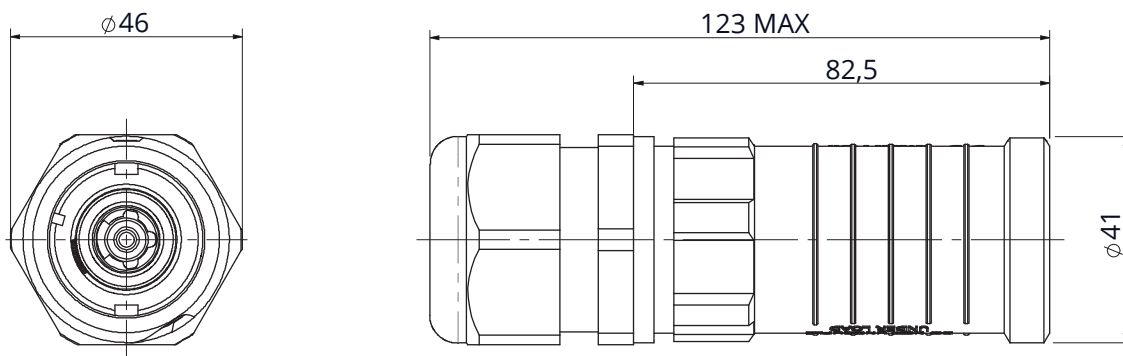


SPPC-HK Connectors - Dimensions

Cable/Line Drain Connectors



Cable/Line Source Connectors








SPPC-HK Connectors - Panel Connectors - 1200V - 250/400A






Panel Source Connectors



250A - M12 Threaded post for conductor up to 70mm²

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-HK-PS-L1-BR-M12-T2	VS440004
 Black - Phase L2	SPPC-HK-PS-L2-BK-M12-T2	VS440017
 Grey - Phase L3	SPPC-HK-PS-L3-GY-M12-T2	VS440071
 Blue - Neutral	SPPC-HK-PS-N-BU-M12-T2	VS440072
 Green - Earth	SPPC-HK-PS-E-GN-M12-T2	VS440018






400A - M12 Threaded post for conductor up to 120mm²

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-HK-PS-L1-BR-M12-T4	VS440033
 Black - Phase L2	SPPC-HK-PS-L2-BK-M12-T4	VS440034
 Grey - Phase L3	SPPC-HK-PS-L3-GY-M12-T4	VS440035
 Blue - Neutral	SPPC-HK-PS-N-BU-M12-T4	VS440032
 Green - Earth	SPPC-HK-PS-E-GN-M12-T4	VS440031






Panel Drain Connectors



250A - M12 Threaded post for conductor up to 70mm²

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-HK-PD-L1-BR-M12-T2	VS440024
 Black - Phase L2	SPPC-HK-PD-L2-BK-M12-T2	VS440025
 Grey - Phase L3	SPPC-HK-PD-L3-GY-M12-T2	VS440069
 Blue - Neutral	SPPC-HK-PD-N-BU-M12-T2	VS440070
 Green - Earth	SPPC-HK-PD-E-GN-M12-T2	VS440001

400A - M12 Threaded post for conductor up to 120mm²

Color*	Designation	Order Number
 Brown - Phase L1	SPPC-HK-PD-L1-BR-M12-T4	VS440011
 Black - Phase L2	SPPC-HK-PD-L2-BK-M12-T4	VS440065
 Grey - Phase L3	SPPC-HK-PD-L3-GY-M12-T4	VS440066
 Blue - Neutral	SPPC-HK-PD-N-BU-M12-T4	VS440068
 Green - Earth	SPPC-HK-PD-E-GN-M12-T4	VS440067

*European Harmonized Color Set, others colors set on request

SPPC-HK Connectors - Cable/Line Connectors - 1200V - 250/400A

Cable/Line Source Connectors

Sleeves included, for cable conductor size - 16 mm² - 25 mm² - 35 mm² - 50 mm² - 70 mm²



250A - Screws terminal for conductor up to 70mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-HK-LS-L1-BR-S-70-M	VS440075
Black - Phase L2	SPPC-HK-LS-L2-BK-S-70-M	VS440055
Grey - Phase L3	SPPC-HK-LS-L3-GY-S-70-M	VS440076
Blue - Neutral	SPPC-HK-LS-N-BU-S-70-M	VS440077
Green - Earth	SPPC-HK-LS-E-GN-S-70-M	VS440078

400A - Crimp contacts 95mm² - 120mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-HK-LS-L1-BR-C-120-OS	VS440056
Black - Phase L2	SPPC-HK-LS-L2-BK-C-120-OS	VS440057
Grey - Phase L3	SPPC-HK-LS-L3-GY-C-120-OS	VS440062
Blue - Neutral	SPPC-HK-LS-N-BU-C-120-OS	VS440064
Green - Earth	SPPC-HK-LS-E-GN-C-120-OS	VS440063

Cable/Line Drain Connectors

Sleeves included, for cable conductor size - 16 mm² - 25 mm² - 35 mm² - 50 mm² - 70 mm²



250A - Screws terminal for conductor up to 70mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-HK-LD-L1-BR-S-70-M	VS440002
Black - Phase L2	SPPC-HK-LD-L2-BK-S-70-M	VS440054
Grey - Phase L3	SPPC-HK-LD-L3-GY-S-70-M	VS440073
Blue - Neutral	SPPC-HK-LD-N-BU-S-70-M	VS440074
Green - Earth	SPPC-HK-LD-E-GN-S-70-M	VS440036

400A - Crimp contacts 95mm² - 120mm²

Color*	Designation	Order Number
Brown - Phase L1	SPPC-HK-LD-L1-BR-C-120-OS	VS440028
Black - Phase L2	SPPC-HK-LD-L2-BK-C-120-OS	VS440029
Grey - Phase L3	SPPC-HK-LD-L3-GY-C-120-OS	VS440030
Blue - Neutral	SPPC-HK-LD-N-BU-C-120-OS	VS440027
Green - Earth	SPPC-HK-LD-E-GN-C-120-OS	VS440026

*European Harmonized Color Set, others colors set on request

SPPC-HK Connectors - Crimping Tool

It is recommended to apply multiple crimp compressions in accordance with the above table to obtain optimum mechanical and electrical performance.

The correct sequence of compressions is shown in Fig.2.

Use the following tool:

- Hand operated crimp tool: HT120

Due to the numerous cable types available, it is recommended to contact our Customer Service to confirm cable & crimp suitability.

Cable Size	Up to 70mm ²	95mm ²	120mm ² AWG 4/0
Insulation Strip (dim L)	26mm	20mm	20mm
Recommended Number of Crimps	N/A (set screw)	2	2
Hand Operated Crimp Tool	N/A	HT120	HT120
Crimp Die Set	N/A	ME24-C	ME29-C
Contact Removal Tool	VS750070	VS750070	VS750070

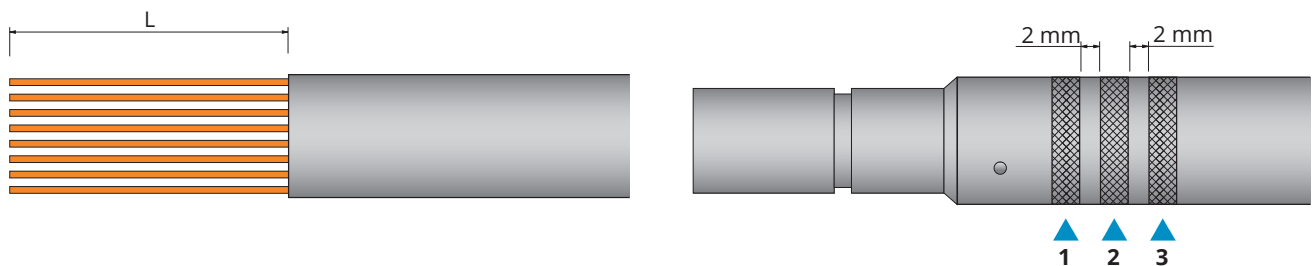


Fig.2

Hand Operated Crimp Tool HT120



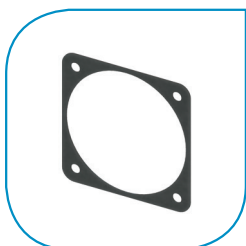
SPPC-HK Connectors - Accessories



Cable Gland - for Cable/Line Connectors

Type	Designation	Order Number
M32 threaded 7mm - 15mm	SPPC-HK-M32-S	VS750061
M32 threaded 11mm-21mm	SPPC-HK-M32-M	VS750060
M32 threaded 15mm-25mm	SPPC-HK-M32-OS	*

* On request



Panel Gasket

Type	Designation	Order Number
Neoprene Gaskets	SPPC-HK-PG	750032

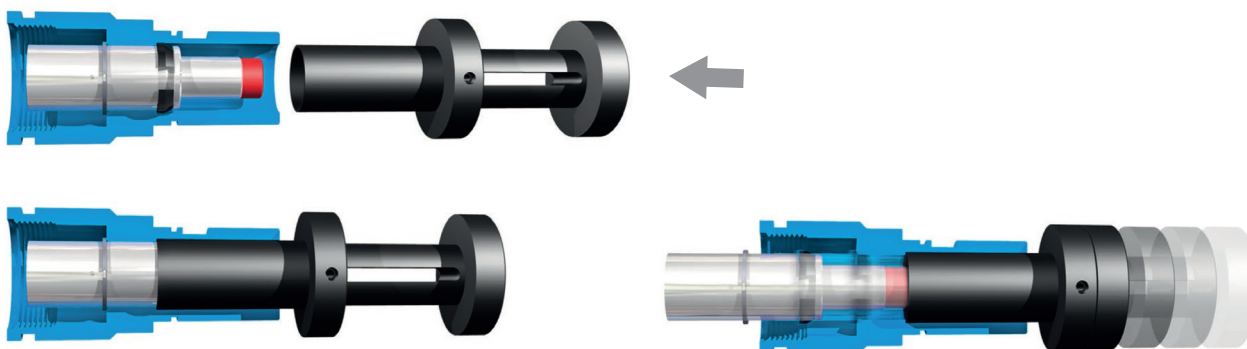


Sleeve For Screw Contacts

Type	Designation	Order Number
Sleeve**	SPPC-HK-SLEEVE	VS750063

** Sleeves for cable conductor size 16 mm² - 25 mm² - 35 mm² - 50 mm² - 70 mm²

Contact Removal Tool



The contacts are inserted from the rear and snap into position within the insulator with no requirements for any cotter/dowel pin or assembly tool. The contacts are removed from the insulator by using a simple tool to release the retaining clip.

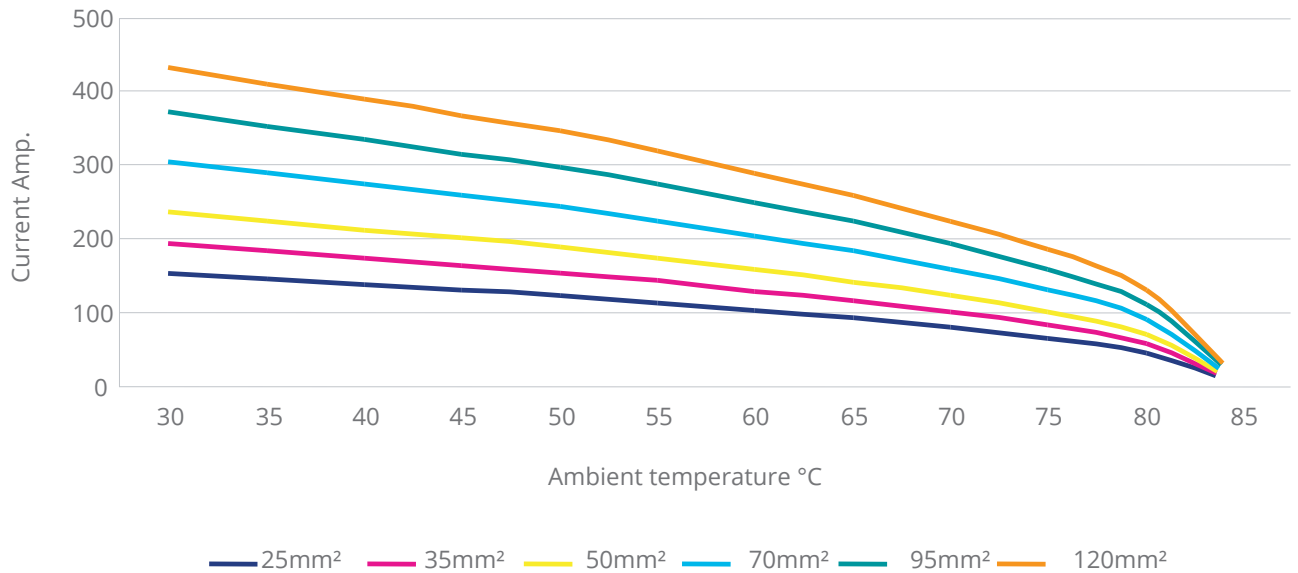
- Improved mechanical insulator strength
- Reliable sealing
- Improved electrical integrity of the insulator
- Reduced assembly times
- The contacts can be removed and replaced

No replacement parts (cotter/dowel pins) are required.

Type	Designation	Order Number
Crimp and Screw contacts	SPPC-HK-RT	VS750070

SPPC-HK Connectors

Derating data for 85°C rubber insulated cables



Characteristics

Operating Voltage	1200V AC or DC
Maximum panel thickness to guarantee insulation	6mm
Panel contact tightening torque	30Nm Max
Screws tightening torque (in-line connectors)	12Nm
Contact retention in Insulator	400N axial load
Inline contact retention	Plastic Clip
Panel mount contact retention	Dowel Pin
Contact release	Front
M32 Clamping range	7mm ÷ 25mm
Flammability	UL94 V0
Environmental sealing (when mated)	IP67
Connector protection (unmated)	IP2X
Rated voltage to Earth	1750Vac, panel thickness<4mm 1200Vac, panel thickness>4mm
Contact resistance	<0.1mΩ
Short circuit current	11KA - 1 seconds
Short circuit current	4KA - 3 seconds
Surge current (din VDE 0102/1.90)	45KA - 10 mseconds
Temperature range	-30°C/+120°C

SPPC-LJP Connectors - Introduction

LUG-IT - Power cable joining system



LUG-IT 300



LUG-IT 120

SPPC-LJP Connectors - Introduction

LUG-IT - Power cable joining system



LUG-IT 300

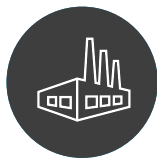


LUG-IT 120

LUG-IT is a safe and efficient means to make temporary connection / extensions of single core power cables that are pre-terminated with copper lug terminals.

APPLICATIONS

- Power distribution
- Utilities
- Electric Vehicles
- Railway Equipment
- Military Field Power
- Mobile Generators
- Loadbanks
- Back-up Power Systems



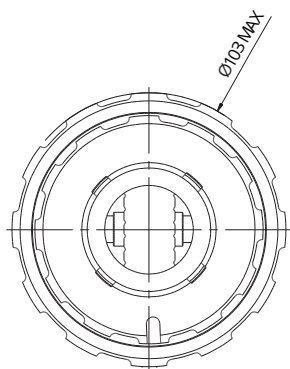
KEY CHARACTERISTICS

- Increase cable utilization
- Reusable
- Suitable for temporary connections
- Standardize on cable lengths held in stock
- Decrease cable purchase
- Reduce transportation of cables between sites
- No need for connectors or junction boxes
- Daisy chain hook up system

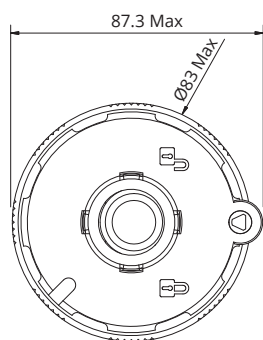
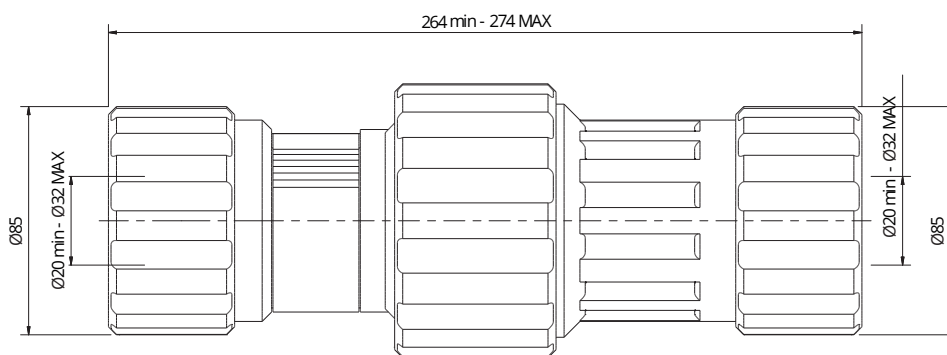
DETAILS

- IP67 Protected when assembled.
- Nominal Voltage Un: 1000Vac
- 2 Lug-it sizes available according to the lug and cable dimensions:
 - LJP-120 from 35mm² up to 120mm²
 - LJP-300 from 150mm² up to 300mm².
- Insulating voltage: 5.000Vac
- Rated current (to be checked with the specific cable characteristics):
 - Lugs 120 mm²:350A (30°C)
 - Lugs 185 mm²:570A (30°C)
 - Lugs 240 mm²:670A (30°C)
 - Lugs 300 mm²:780A (30°C)
- Working temperature: -30°C ÷ +120°C
- Protection degree: IP67 (EN 60529)
- Audible and tactile indication of locking
- Secure lock for unwanted / unauthorised release
- Quick assembly in approx. 2 minutes without special tools. The system can be disassembled and reused

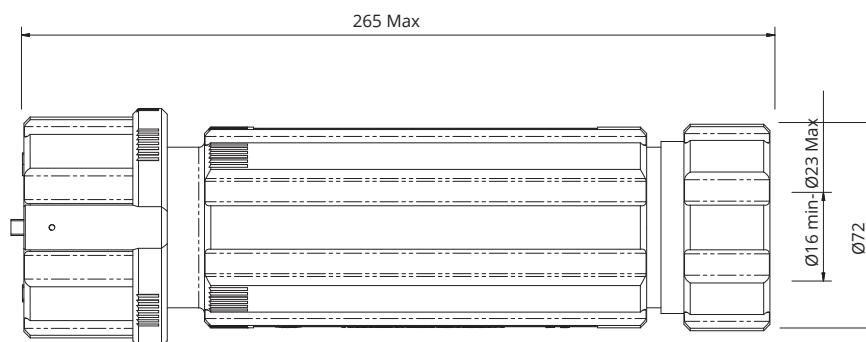
SPPC-LJP Connectors - Dimensions



LUG-IT 300



LUG-IT 120



SPPC-LJP Connectors - LUG-IT 300 - 1000V



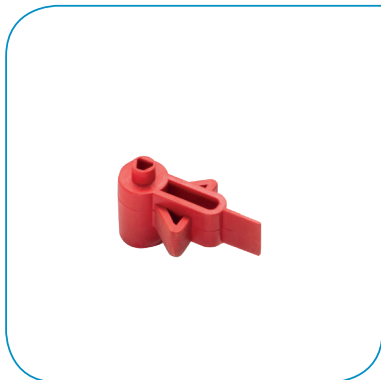
Accepts cables 185mm², 240mm² and 300mm², for lugs with 12mm holes,
Lug Palm Width 45mm max, Bolt Hole 12mm,
External Cable Ø 20mm - 32mm.

Designation

SPPC-LJP-300

Order Number

VS354801



LUG-IT KEY

remote locking/release key

Designation

SPPC-LJP-KEY

Order Number

VS750082

Lock the central locking ring using the remote release key.



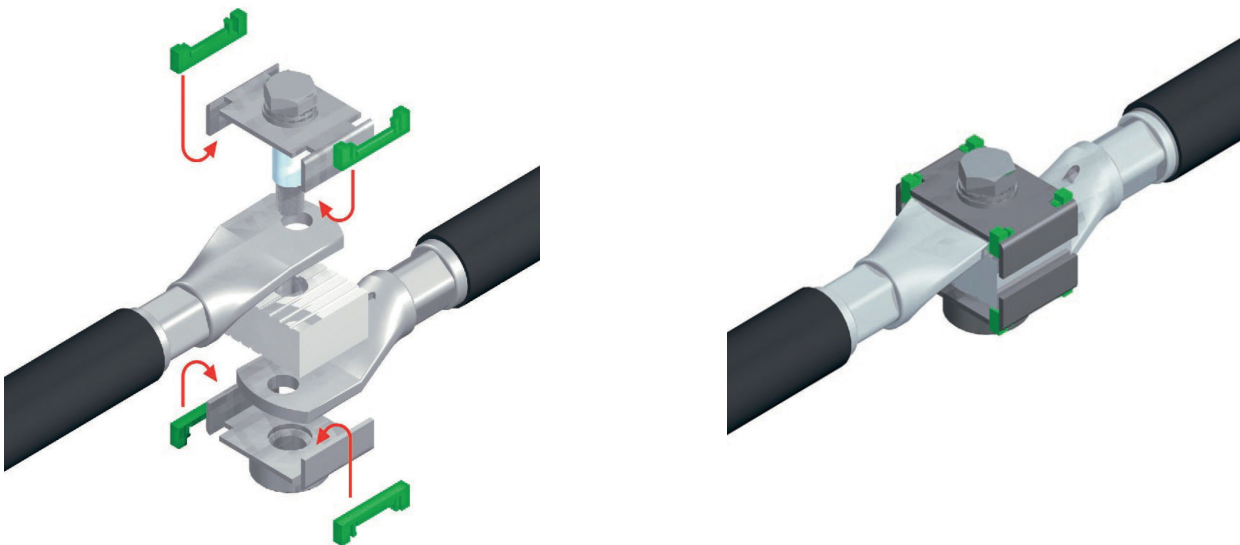
SPPC-LJP Connectors - LUG-IT 300



Assemble component parts over the lugs and onto the cables. The special gaskets easily allow this step.

Lug Palm Width 45mm max, Bolt Hole 12mm,

Terminate the lugs into the joining block using the correct lugs shoulders. The system is designed to avoid using any loose parts.



Ensure the back shell keyways are correctly positioned to mate with each other.

Rotate the central locking ring till it snaps into fully mated position. Tighten the two back nuts.



SPPC-LJP Connectors - LUG-IT 120 - 1000V



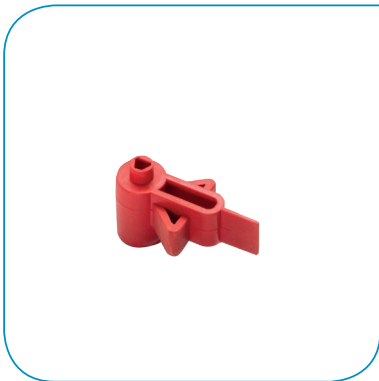
Accepts cable 35mm² up to 120mm², for lugs with 8,2mm holes,
Lug Palm Width 30mm max, Bolt Hole 10mm or 12mm,
External Cable Ø 16mm – 23mm.

Designation

SPPC-LJP-120

Order Number

VS354804



LUG-IT KEY

remote locking/release key

Designation

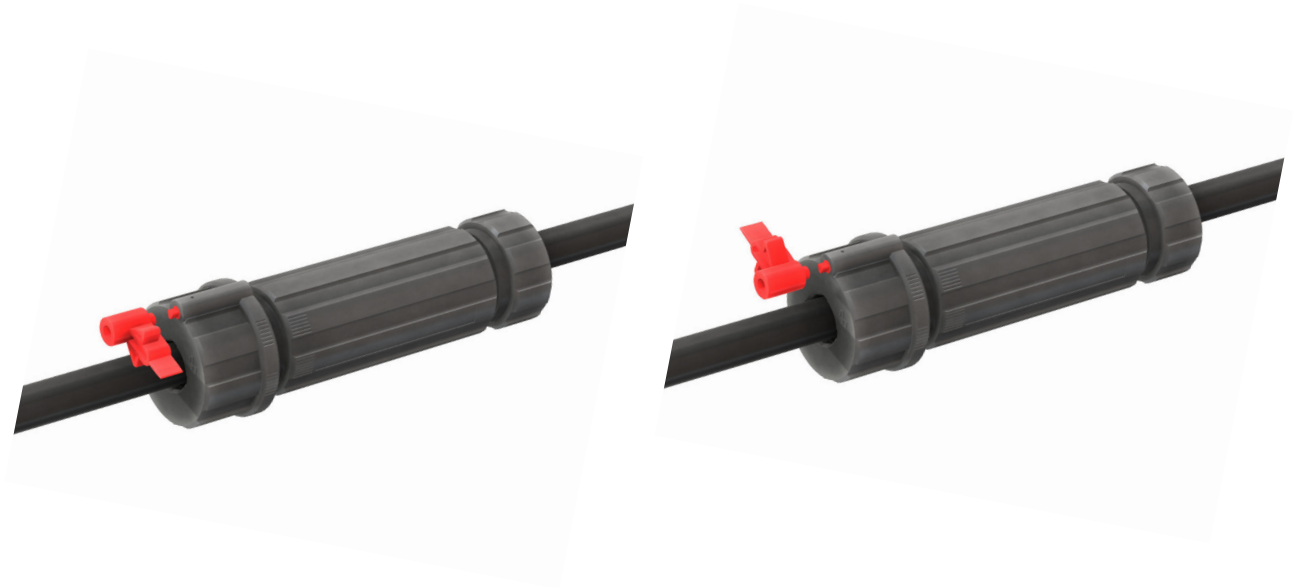
SPPC-LJP-KEY

Order Number

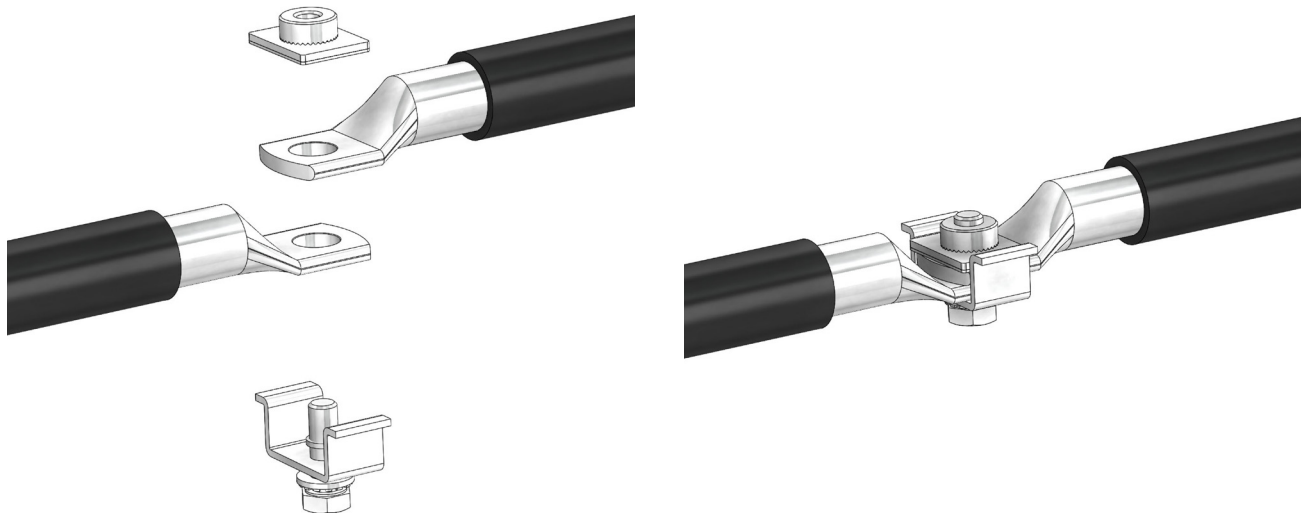
VS750082

SPPC-LJP Connectors - LUG-IT 120

Lock the central locking ring using the remote release key.



Lug Palm Width 30mm max, Bolt Hole 10mm or 12mm,



Information regarding the use of the product within recommended safety limits

To use the connectors described in this catalogue according to the necessary safety requirements we suggest you apply the following criteria:

- use the connectors and connected cables within their electrical and environmental limits
- follow the characteristics of each version (shell, class and type of strain relief) and carefully choose the appropriate connector for the required use
- make sure to respect the procedures regarding the correct assembly of connectors and the crimping of contacts
- any connector damaged during shipment, storage, assembly or use should be replaced
- never uncouple the connectors when under power
- always protect the parts against shock when the circuit is under power
- always check the circuit before putting it under power
- consult Radiall VanSystem Srl if in doubt
- the user must take final responsibility for electrical safety Radiall VanSystem Srl reserves the right to amend the specifications of this catalogue without issuing prior notice.

For the instructions concerning assembly and crimping of contacts please consult the appropriate tools manuals.

We recommend to respect the following general rules:

- to be used always the tools recommended by Radiall VanSystem's catalogue or manuals
- to be applied the suggested norms for tool maintenance and calibration

DO NOT USE ALTERNATIVE GREASES OR OILS which could damage the insert and affect the functionality of the connector. Radiall VanSystem Srl reserves the right to amend the specifications of this catalogue without issuing prior notice.

The data defined in this document are given as an indication. In the effort to improve our products, we reserve the right to make any change judged necessary.



www.radiall.com

FRANCE

RADIALL S.A.
Tel +33149353535
info@radiall.com



www.vansystem.eu

ITALY

Radiall VanSystem S.r.l.
Tel. +39023569931
info.vansystem@radiall.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Heavy Duty Power Connectors](#) category:

Click to view products by [Radiall](#) manufacturer:

Other Similar products are found below :

[6646058-2](#) [6646137-1](#) [6646138-1](#) [6646940-1](#) [6651091-1](#) [6651525-1](#) [6651529-1](#) [696475-1](#) [702-32-01109](#) [73080255059](#) [73080965046](#)
[7310205040001](#) [765-16-0080B](#) [765-18-0080D](#) [902-77-02113](#) [PS00/A0620/6300](#) [AN0024023](#) [154-42B7WM250](#) [MS3117-14AC](#) [1643543-1](#)
[1766966-1](#) [1791340000](#) [NLDFT-3-BL-L-S120-M40A](#) [NLDFT-N-W-L-C240-M40B](#) [1926015-1](#) [NLS-3-BL-C240-M40B](#) [NLS-N-W-C240-](#)
[M40B](#) [NPS-3-BL-T6](#) [2-1589900-8](#) [9300480317](#) [294-0091-01100](#) [296-0040-01100](#) [1-6609148-0](#) [A32595-0049](#) [1766249-1](#) [19000005132](#)
[1926016-1](#) [1-966831-8](#) [AN0024202](#) [AN0264023](#) [279-0841-10100A](#) [281-0334-00100A](#) [RMSB4](#) [419-2083-301](#) [LCDX4/0-14B-X](#) [075-8519-](#)
[001](#) [078238-1613](#) [07.470.3256.0](#) [09000005288](#) [09140240311](#)