## **Product Brochure**

# S-Line Single Pole Connectors







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# More than 100 years of know-how and competence.

Our company R&S Rauscher & Stoecklin, founded in 1919, is a wellestablished manufacturer of transformers, switchgear, industrial electrical connectors and other electrical equipment.

Based in Sissach, Switzerland, we have more than 100 years of experience in the production of high-end electrical products. In 2012, R&S Rauscher & Stoecklin became part of R&S, a leading provider of electrical infrastructure products around the globe.

### The R&S portfolio includes

- Transformers
   (Power, Distribution, Cast resin, Instrument)
- Switches
   (High voltage, Medium voltage, Overhead line, Railway)
- Industrial electrical connectors
- Distribution boards
- Electric switchboards

Because of our flexibility and urge towards innovation, we are a reliable partner, capable of solving all challenges presented to us by our customers.

Our company is certified to all established standards and we have a passion for custom-made, project-specific products.

# Reliable single pole connectors for maximum safety.

The S-Line connectors with a rated current of 500 A and 800 A are used in applications such as the event industry, marine, construction, power transmission and distribution.

The connectors are compatible with other Powerlock-connectors and are fully certified by UL, VDE, RoHS and CE standards.

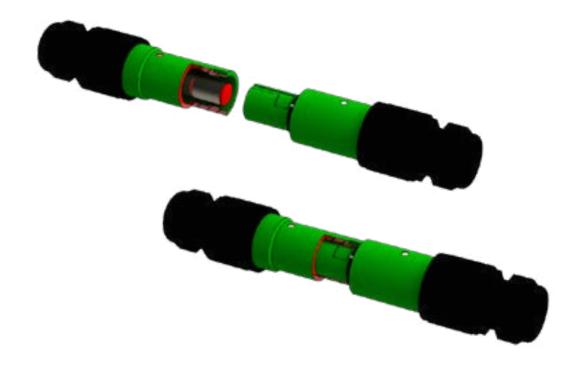


# General information of our S-Line connectors.

- Maximum current of 800A
- Colour coded according to the International Electrical Colour Coding Standard
- Locking mechanism to prevent connection errors and accidental disconnection under load
- Hardly inflammable (UL94-V0)
- Finger-proof contacts for maximum safety
- IP67 ingress protection
- Multipoint, self-wiping contact area
- High impact bodies
- High temperature resistant materials
- Integral cable strain relief
- Metric EN compliant cable glands
- Increased cable clamping range
- Easy assembly with standard tools
- Daisy chain hook-up system
- Panel mount connector  $\delta$  mounting plates
- Rubber hand grip for ease of coupling and added impact protection
- Rubber protective caps to protect connectors from moisture, dirt and abrasion when uncoupled (optional)

# Bayonet locking system for highest reliability.

A bayonet locking system is a safe fastening mechanism consisting of a male connector with one or multiple pins, as well as a female receptor with matching slots to keep the two parts locked together. The slots are shaped like a capital letter L with a bend in order that the connector is no longer free to rotate unless pushed down against the spring.



## **Portfolio Overview**



#### **S-Line 500A**

The 500A S-Line single pole connectors are perfectly suitable for the increased demand for temporary high power systems in entertainment & industrial applications.



#### S-Line 800A

The 800A S-Line single pole connectors are designed for special applications in the marine, military and event industry, where high currents are demanded.



### **Mating Box**

The Mating Box is the ideal equipment to easy install all phases L1, L2, L3 as well as with the N-Phase and Earthing in one housing

# **Colour Coding**



# E-Connector

### International Electrical Colour Coding Standards

Region	Earth (E)	Neutral (N)	Line 1 (1)	Line 2 (2)	Line 3 (3)
Europe & UK (Harmonised)					
UK (Traditional)					
Australia					
USA					

# **Types of Connectors**

Male Connectors



**Line Drain** 



**Panel Drain** 

**Female Connectors** 

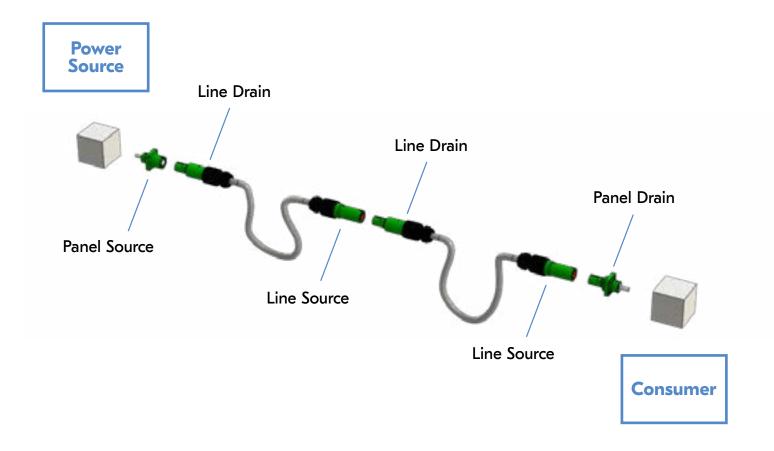


**Line Source** 



\*Product overview using the example of the L2-connector

# **Terminology**



# **Areas of application**



#### **Events**

The single pole connectors are ideal for the event and entertainment industry due to their small dimensions.



#### **Marine**

The single pole connectors are often used for fast power supply in the marine segment, for example in shore to ship power connection.



#### Construction

Numerous protection mechanisms make our connectors the most safe products of the construction site.



#### Power transmission and distribution

Easy handling and low weight of connectors and cables make the single pole connectors most suitable for generators and other power transmission and distribution equipment.

## **Structure of a connector**

### 1. Housing

Plastic housing designed for rough environments. Easy to handle.

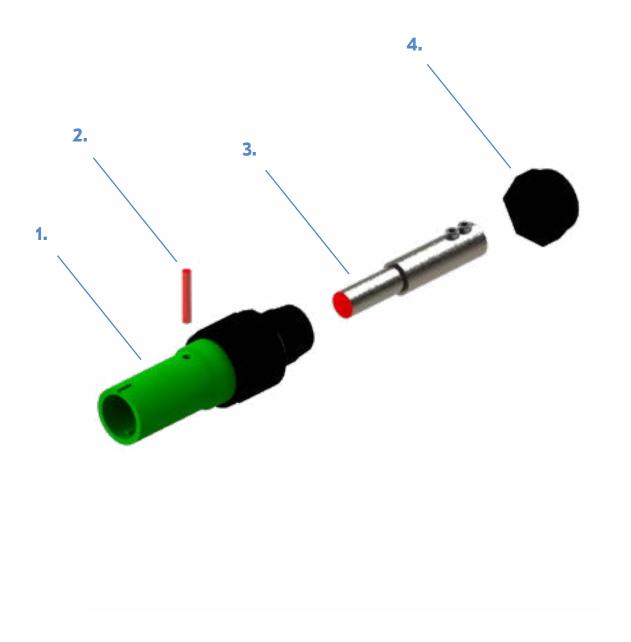
### 2. Fixing pin

For easy assembly of the single pole connectors.

**3. Contact pin**Advanced contact design for reliable and safe power transmission.

### 4. Cable gland

Built-in cable gland for fast cable connection.



# **Technical Data**



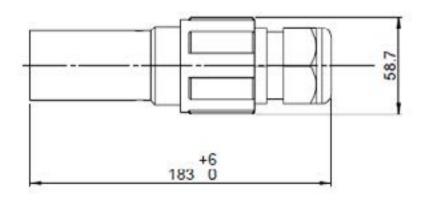


Technical Data	Unit	500A	800A
No of Contacts		1	
Max Continuous Current Rating	А	500	800
Surge Current	kA	7:	5
Short Circuit Rating	kA	up to	35.5
Cables Cross Sectional Area C.S.A.	mm²	25 to	300
Contact Termination		Screw o	r Crimp
Mating Method		Bayone	t Lock
Operating Voltage	٧	1000	(AC)
Max Rated Voltage to Earth	kV	2 (AC) /	3 (DC)
Min Flashover	kV	9.5 (DC) /	Peak (AC)
Insulation Resistance	٧	>5M ohms (	a 500 (DC)
Ingress Protection		IPo	57
Protection against Electrical Shock		IP2	2X
Flammability		UL94	I-V0
Mating Cycles		>50	00
Shell Material		High Temperatur	e Thermoplastic
Contact Plating		Silv	rer



# **Line Source**





Current (A)	Type designation	Cable gland range in mm	Termination	Article No.
500	L1 (Brown)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27010 27011 27012 27013
	L2 (Black)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27014 27015 27016 27017
	L3 (Grey)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27018 27019 27020 27021
	N (Blue)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27022 27023 27024 27025
	PE (Green)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27026 27027 27028 27029

# **Line Source**



Current (A)	Type designation	Cable gland range in mm	Termination	Article No.
500	L1 (Brown)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27030 27031 27032
	L2 (Black)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27033 27034 27035
	L3 (Grey)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27036 27037 27038
	N (Blue)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27039 27040 27041
	PE (Green)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27042 27043 27044

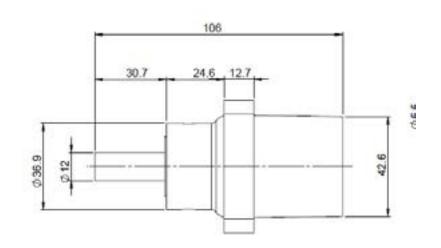
# S-Line Connectors **Line Source**



Current (A)	Type designation	Cable gland range in mm	Termination	Article No.
	L1 (Brown)	22-32	Crimp 240mm <sup>2</sup>	27055
	L2 (Black)	22-32	Crimp 240mm <sup>2</sup>	27056
	L3 (Grey)	22-32	Crimp 240mm <sup>2</sup>	27057
	N (Blue)	22-32	Crimp 240mm <sup>2</sup>	27058
	PE (Green)	22-32	Crimp 240mm <sup>2</sup>	27059
	L1 (Brown)	30-38	Crimp 240mm <sup>2</sup>	27060
	L2 (Black)	30-38	Crimp 240mm <sup>2</sup>	27061
	L3 (Grey)	30-38	Crimp 240mm <sup>2</sup>	27062
	N (Blue)	30-38	Crimp 240mm <sup>2</sup>	27063
800	PE (Green)	30-38	Crimp 240mm <sup>2</sup>	27064
333	L1 (Brown)	22-32	Crimp 300mm <sup>2</sup>	27065
	L2 (Black)	22-32	Crimp 300mm <sup>2</sup>	27066
	L3 (Grey)	22-32	Crimp 300mm <sup>2</sup>	27067
	N (Blue)	22-32	Crimp 300mm <sup>2</sup>	27068
	PE (Green)	22-32	Crimp 300mm <sup>2</sup>	27069
	L1 (Brown)	30-38	Crimp 300mm <sup>2</sup>	27070
	L2 (Black)	30-38	Crimp 300mm <sup>2</sup>	27071
	L3 (Grey)	30-38	Crimp 300mm <sup>2</sup>	27072
	N (Blue)	30-38	Crimp 300mm <sup>2</sup>	27073
	PE (Green)	30-38	Crimp 300mm <sup>2</sup>	27074

# **Panel Source**

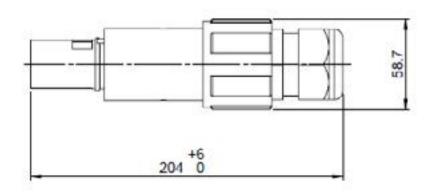




Current (A)	Type designation	Termination	Article No.
	L1 (Brown)	T5 Thread	27075
	L2 (Black)	T5 Thread	27076
500	L3 (Grey)	ST5 Thread	27077
	N (Blue)	T5 Thread	27078
	PE (Green)	T5 Thread	27079
	L1 (Brown)	T8 Thread	27080
	L2 (Black)	T8 Thread	27081
800	L3 (Grey)	T8 Thread	27082
	N (Blue)	T8 Thread	27083
	PE (Green)	T8 Thread	27084

# **Line Drain**





Current (A)	Type designation	Cable gland range in mm	Termination	Article No.
	L1 (Brown)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27085 27086 27087 27088
	L2 (Black)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27089 27090 27091 27092
500	L3 (Grey)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27093 27094 27095 27096
	N (Blue)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27097 27098 27099 27100
	PE (Green)	19-28	Screw 120mm <sup>2</sup> Crimp 95mm <sup>2</sup> Crimp 120mm <sup>2</sup> Crimp 150mm <sup>2</sup>	27101 27102 27103 27104

# S-Line Connectors Line Drain



Current (A)	Type designation	Cable gland range in mm	Termination	Article No.
	L1 (Brown)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27105 27106 27107
	L2 (Black)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27108 27109 27110
500	L3 (Grey)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27111 27112 27113
	N (Blue)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27114 27115 27116
	PE (Green)	22-32	Screw 150mm <sup>2</sup> Crimp 150mm <sup>2</sup> Crimp 185mm <sup>2</sup>	27117 27118 27119

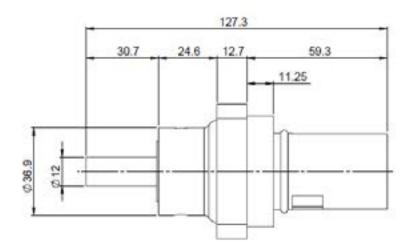
# S-Line Connectors Line Drain



Current (A)	Type designation	Cable gland range in mm	Termination	Article No.
	L1 (Brown)	22-32	Crimp 240mm²	27120
	L2 (Black)	22-32	Crimp 240mm²	27121
	L3 (Grey)	22-32	Crimp 240mm <sup>2</sup>	27122
	N (Blue)	22-32	Crimp 240mm <sup>2</sup>	27123
	PE (Green)	22-32	Crimp 240mm <sup>2</sup>	27124
	L1 (Brown)	30-38	Crimp 240mm <sup>2</sup>	27125
	L2 (Black)	30-38	Crimp 240mm <sup>2</sup>	27126
	L3 (Grey)	30-38	Crimp 240mm <sup>2</sup>	27127
	N (Blue)	30-38	Crimp 240mm <sup>2</sup>	27128
800	PE (Green)	30-38	Crimp 240mm <sup>2</sup>	27129
000	L1 (Brown)	22-32	Crimp 300mm <sup>2</sup>	27130
	L2 (Black)	22-32	Crimp 300mm <sup>2</sup>	27131
	L3 (Grey)	22-32	Crimp 300mm²	27132
	N (Blue)	22-32	Crimp 300mm <sup>2</sup>	27133
	PE (Green)	22-32	Crimp 300mm <sup>2</sup>	27134
	L1 (Brown)	30-38	Crimp 300mm <sup>2</sup>	27135
	L2 (Black)	30-38	Crimp 300mm <sup>2</sup>	27136
	L3 (Grey)	30-38	Crimp 300mm <sup>2</sup>	27137
	N (Blue)	30-38	Crimp 300mm <sup>2</sup>	27138
	PE (Green)	30-38	Crimp 300mm <sup>2</sup>	27139

# **Panel Drain**





Current (A)	Type designation	Termination	Article No.
	L1 (Brown)	T5 Thread	27140
	L2 (Black)	T5 Thread	27141
500	L3 (Grey)	ST5 Thread	27142
	N (Blue)	T5 Thread	27143
	PE (Green)	T5 Thread	27144
	L1 (Brown)	T8 Thread	27145
	L2 (Black)	T8 Thread	27146
800	L3 (Grey)	T8 Thread	27147
	N (Blue)	T8 Thread	27148
	PE (Green)	T8 Thread	27149

## Accessoires



### 45° Adapter

The 45° adapter is designed for a better plug in process to the panel drain or panel source

On Request.



#### **Reduction Sleeve Kit**

Reduction sleeve kits for screw termination for the use with smaller diameter cables from 25mm up to 95mm.

On Request.

## Accessoires



### Rotalock

The Rotalock are designed for greater cable extensions.

On Request.

Suitable for all designs:

- Line Drain
- Line Source
- Panel Drain
- Panel Source

# Products customized to your own needs

If standard solutions do not meet all the requirements of an application, customer-specific solutions are made upon request.

In doing so, the customer is involved in each development step, thus enabling us to come up with a perfect solution. In this area, R&S Rauscher & Stoecklin has extensive know-how and numerous reference projects.





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