

SCHALTBAU CONNECTORS



Schaltbau GmbH develops and manufactures reliable, durable electromechanical components and customer-specific solutions for railways and industry.

The company was founded in Munich in 1929. Core functions such as sales & marketing, R&D, competence centre, HR and administration are located at the Munich site. In addition, the company has two production sites in Bavaria, at Aldersbach in the Passau district, and at Velden in the Landshut district.

The individual components of Schaltbau products are manufactured at Aldersbach. Almost all of Schaltbau's products are assembled at Velden, and other tasks such as logistics, quality assurance, fault analysis & testing, service & repair, and industrial engineering are carried out there.

LV Series

The Schaltbau LV Series connectors are especially designed to meet the demands of modern materials handling vehicles. They exceed the requirements of standard EN 1175-1 in many of their features. There is an option for chargers with electrolyte circulation system.

Like all LV Series connectors, also this option is intermateable with all standard commercial charging connectors. Available as 80, 160, 320 and 500 amp connector.

LV80/120



LV160/250



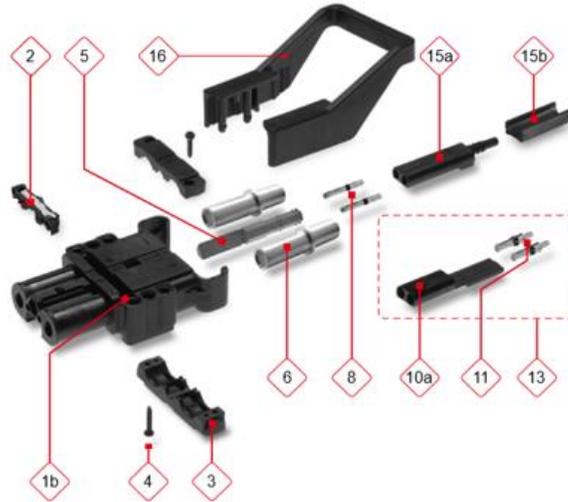
LV320



LV500

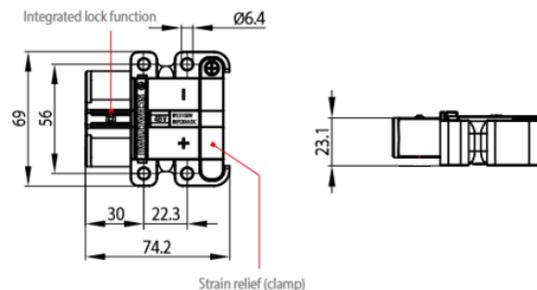
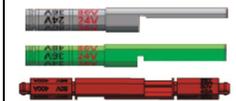


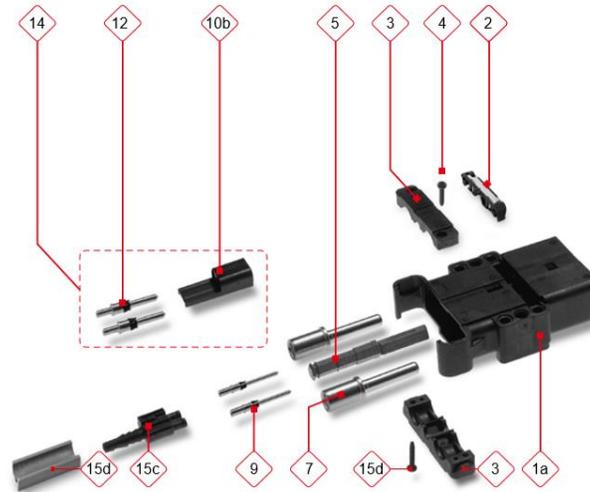
LV80/120 



Female connector

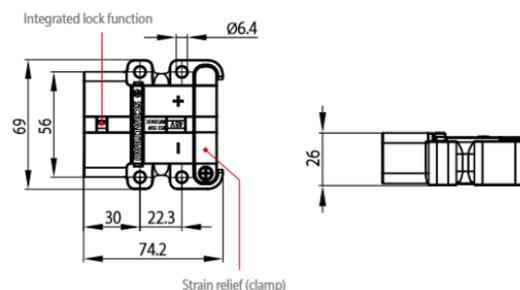
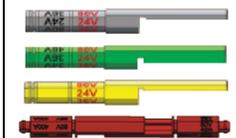
Item	Ordering code	Description
1b	LV80/120 G-SP	Housing Shell LV80/120 - Female, incl. pilot contact adapter (10a)
2	LV80/120 S	Locking Part "Schaltbau" for SCHALTBAU DIN 80
3	LV80 D	Cable Clamp LV80
4	LV SC 3.5X16	Tapping Screw SC 3.5x16 for cable clamp LV 80
5	LV80-N-GR LV80-T-GN LV120-N-R-S	Coding Pin SCHALTBAU DIN 80 – gray Coding Pin SCHALTBAU DIN 80 – green Coding Pin SCHALTBAU DIN 120 – red
6	LV80/120 S6/25 LV80 S6/35	Main Contact SCHALTBAU DIN 80 Female - 25 mm ² Main Contact SCHALTBAU DIN 80 Female - 35 mm ²
8/11	LV80 BBC-2.5-AG	Auxiliary/pilot contact SCHALTBAU DIN 80 Female
13	LV80 P-S/S	Pilot Contact SCHALTBAU DIN 80 Female - 2 pieces, incl adapter (10a)
15a	LV80 LV-S	Air Adapter SCHALTBAU DIN 80 Female
15b	LV80 DS-L	Spacer LV80





Male connector

Item	Ordering code	Description
1a	LV80/120 G-P	Housing Shell LV80/120 - Male
2	LV80 S	Locking Part "Schaltbau" for SCHALTBAU DIN 80
3	LV80 D	Cable Clamp LV80
4	LV SC 3.5X16	Tapping Screw SC 3.5x16 for cable clamp LV 80
5	LV80-N-GR LV80-T-GN LV80-U-GE LV120-N-R-P	Coding Pin SCHALTBAU DIN 80 – gray Coding Pin SCHALTBAU DIN 80 – green Coding Pin SCHALTBAU DIN 80 – yellow (universal) Coding Pin SCHALTBAU DIN 120 – red
7	LV80 P6/25 LV80 P6/35	Main Contact SCHALTBAU DIN 80 Male - 25 mm ² Main Contact SCHALTBAU DIN 80 Male - 35 mm ²
9/12	LV80 SBC-2.5-AG	Auxiliary/pilot Contact SCHALTBAU DIN 80 Male
14	LV80 P-P/S	Pilot Contact SCHALTBAU DIN 80 Male - 2 pieces, incl adapter (10b)
15c	LV80 LV-P	Air Adapter SCHALTBAU DIN 80 Male
15d	N.A.	Not applicable on LV80/120

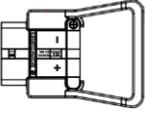
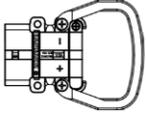


Ordering code

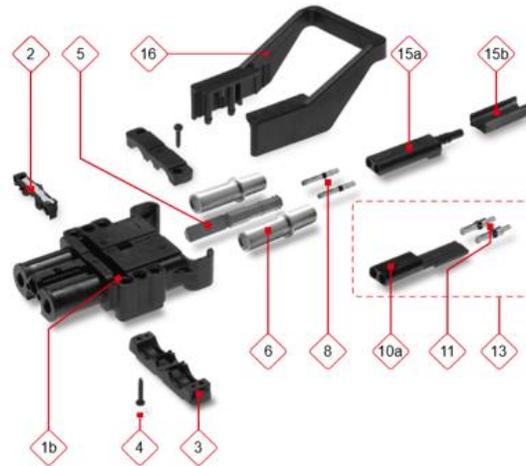
Example:

LV80/120-R-S25-0-2-L0-H3

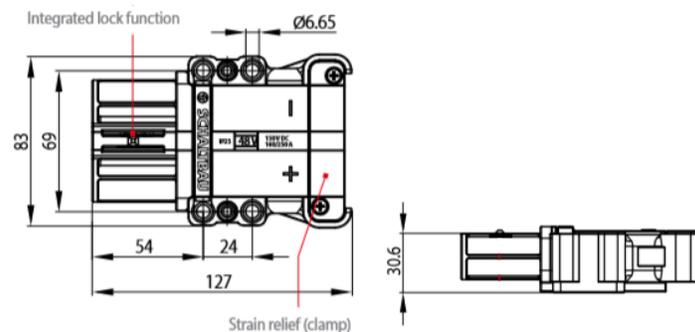
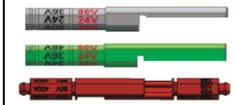
<p>Series: _____ LV80/120</p> <p>Keying plug: _____ R – Red N – Gray T – Green U – Yellow (universal)</p> <p>Main contacts: _____ P25 – Pin 25mm² P16 – Pin 16 mm² * P10 – Pin 10 mm² * S25 – Socket 25 mm² S16 – Socket 16 mm² * S10 – Socket 10 mm² * *Contact supplied with reducer</p> <p>Pilot contacts: _____ 0 – None 2 – 2 pilot contacts</p> <p>Aux. contacts: _____ 0 – None 2 – 2 aux. contacts</p> <p>Air tube adapter: _____ L0 – None L1 – Air tube adapter</p> <p>Handle: _____ H0 – None H1 – Black, snap on H2 – Red, snap on H1/S – Black, screw on H2/S – Red, screw on</p>	<div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; height: 500px;"></div>
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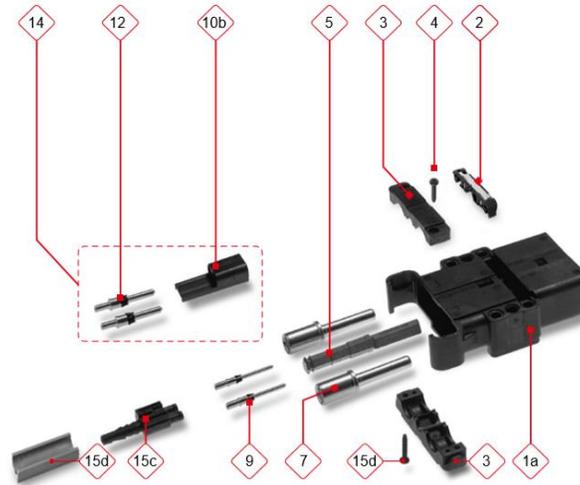
Accessories		
Picture	Ordering code	Description
	LV RH-25/10 LV RH-25/16	Reducing Bushing SCHALTBAU 25 mm ² - 10 mm ² Reducing Bushing SCHALTBAU 25 mm ² - 16 mm ²
	LV80 H1 LV80 H2	Snap-on Handle SCHALTBAU LV 80 - black Snap-on Handle SCHALTBAU LV 80 - red
	LV80 H1/S LV80 H2/S	Handle SCHALTBAU DIN 80 with 2 Screws– black Handle SCHALTBAU DIN 80 with 2 Screws– red

LV160/250

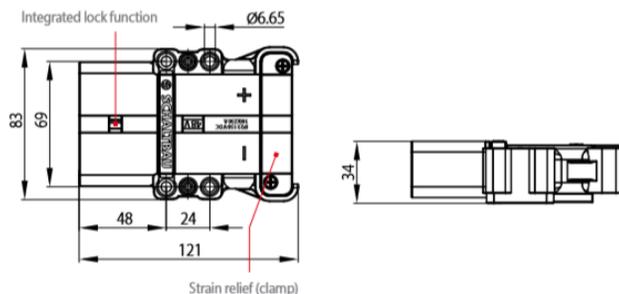


Female connector		
Item	Ordering code	Description
1b	LV160/250 G-SP	Housing Shell LV160/250 - Female, incl. pilot contact adapter (10a)
2	LV160/250 S	Locking Part "Schaltbau" for SCHALTBAU DIN 160
3	LV160/250 D	Cable Clamp LV160/250
4	LV SC 3.5X19	Tapping Screw SC 3.5x19 for cable clamp LV 160/320
5	LV160/320-N-GR LV160/320-T-GN LV250/400-N-R-S	Coding Pin SCHALTBAU DIN 160/320 – gray Coding Pin SCHALTBAU DIN 160/320 – green Coding Pin SCHALTBAU DIN 250/400 – red
6	LV160/250 S8.5/50	Main Contact SCHALTBAU DIN 160 Female - 50 mm ²
9	LV160 BBC-2.5-AG	Auxiliary Contact SCHALTBAU DIN 160 Female
11	BCC-2.5-AG	Pilot Contact SCHALTBAU LV160/320 Female
13	LV160/320 P-S/S	Pilot Contact SCHALTBAU DIN 160/320 Female - 2 pieces, incl adapter (10a)
15a	LV160/320 LV-S	Air Adapter SCHALTBAU DIN 160/320 Female
15b	LV160/320 DS-LS	Spacer LV160/320





Male connector			
Item	Ordering code	Description	
1a	LV160/250 G-P	Housing Shell LV160/250 - Male	
2	LV160/250 S	Locking Part "Schaltbau" for SCHALTBAU DIN 160	
3	LV160/250 D	Cable Clamp LV160/250	
4	LV SC 3.5X19	Tapping Screw SC 3.5x19 for cable clamp LV 160/320	
5	LV160/320-N-GR LV160/320-T-GN LV160/320-U-GE LV250/400-N-R-P	Coding Pin SCHALTBAU DIN 160/320 – gray Coding Pin SCHALTBAU DIN 160/320 – green Coding Pin SCHALTBAU DIN 160/320 – yellow (universal) Coding Pin SCHALTBAU DIN 250/400 – red	
7	LV160 P8.5/50	Main Contact SCHALTBAU DIN 160 Male - 50 mm ²	
9	LV160 SBC-2.5-AG	Auxiliary Contact SCHALTBAU DIN 160 Male	
12	SCC-2.5-AG	Pilot Contact SCHALTBAU LV160/320 Male	
14	LV160/320 P-P/S	Pilot Contact SCHALTBAU DIN 160/320 Male - 2 pieces, incl adapter (10b)	
15c	LV160/320 LV-P	Air Adapter SCHALTBAU DIN 160/320 Male	
15d	LV160/320 DS-LP	Spacer LV160/320	



Ordering code

Example:

LV160/250-R-S25-0-2-L0-H3

Series: _____
LV160/250

Keying plug: _____
R – Red
N – Gray
T – Green
U – Yellow (universal)

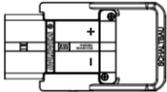
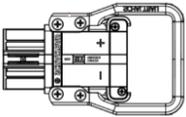
Main contacts: _____
P50 – Pin 50mm²
P35 – Pin 35 mm² *
P25 – Pin 25 mm² *
S50 – Socket 50 mm²
S35 – Socket 35 mm² *
S25 – Socket 25 mm² *
*Contact supplied with reducer

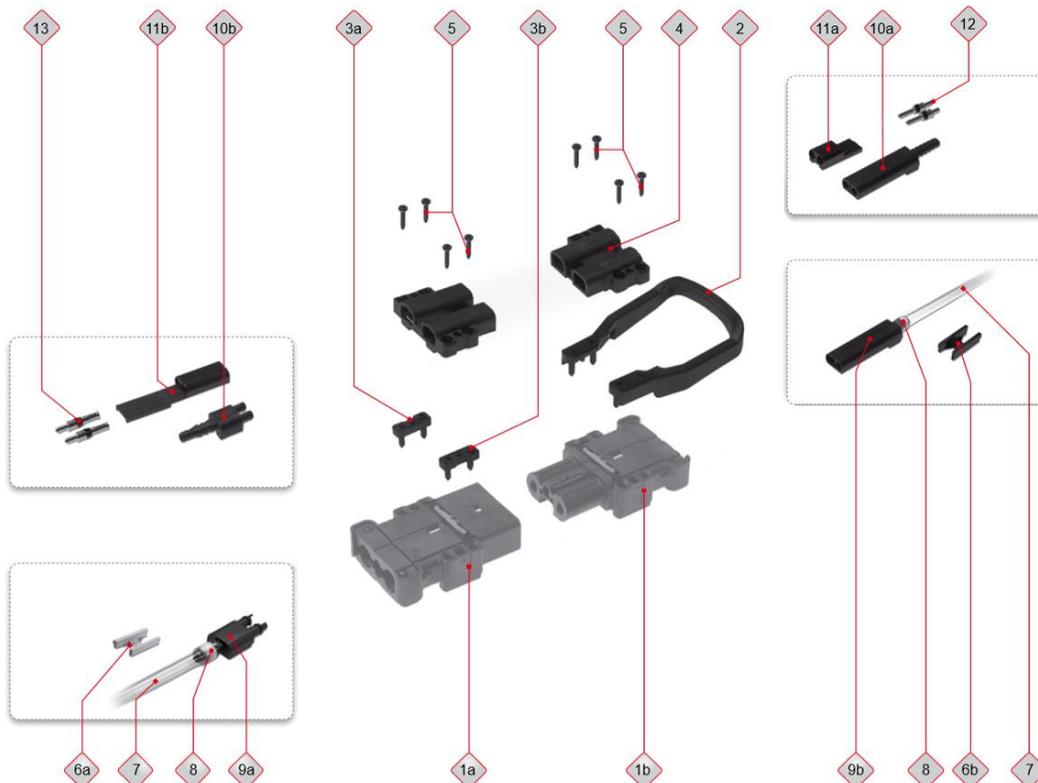
Pilot contacts: _____
0 – None
2 – 2 pilot contacts

Aux. contacts: _____
0 – None
2 – 2 aux. contacts

Air tube adapter: _____
L0 – None
L1 – Air tube adapter

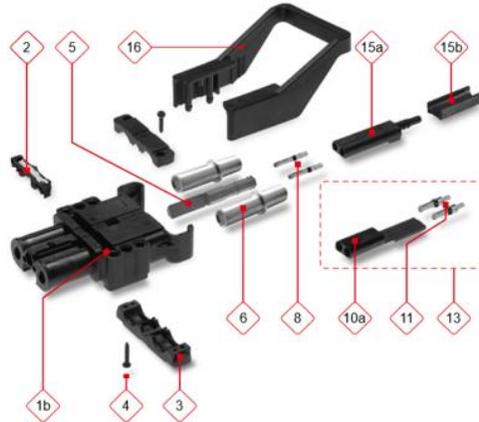
Handle: _____
H0 – None
H1/S – Black, screw on
H2/S – Red, screw on
H3 – Black, snap on
H4 – Red, snap on

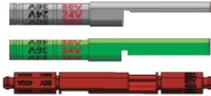
Accessories		
Picture	Ordering code	Description
	LV RH-50/25 LV RH-50/35	Reducing Bushing SCHALTBAU 50 mm ² - 25 mm ² Reducing Bushing SCHALTBAU 50 mm ² - 35 mm ²
	LV160/320 H3 LV160/320 H4	Snap-on Handle SCHALTBAU LV 160/320 – black Snap-on Handle SCHALTBAU LV 160/320 – red
	LV160/320 H1/S LV160/320 H2/S	Handle SCHALTBAU LV 160/320 with screws – black Handle SCHALTBAU LV 160/320 with screws – red
	Multifunctional adapters for LV160/320/500	See drawing and table below

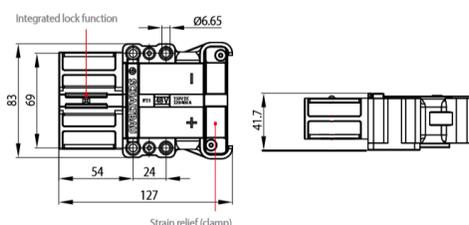


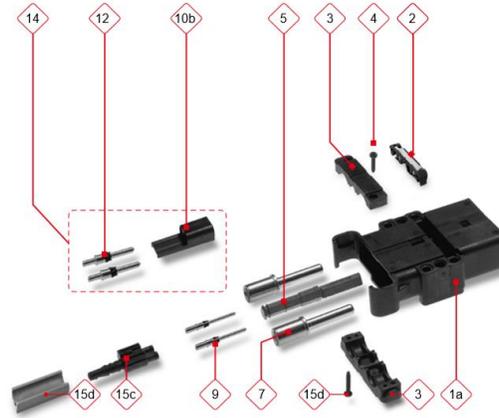
Accessories		
Picture	Ordering code	Description
	LV160/320 HW1 LV160/320 HW2	Handle for SCHALTBAU DIN 160/320 when central water module support is used, black Handle for SCHALTBAU DIN 160/320 when central water module support is used, red
	LV160/320 MA-L LV160/320 MA-R	Distance Piece Left Distance Piece Right
	LV160/320 MT-M	Auxiliary Module Support SCHALTBAU DIN 160/320 for central mounting
	LV SC 5.5X25	Tapping Screw SC 5,5x25 - black, galvanized
	LV160/320 DS-WP	Distance Piece for water module – Male
	LV160/320 DS-WS	Distance Piece for water module – Female
	LV160/320 WK-P	Water Module with tube SCHALTBAU DIN 160/320 and plug (incl pos 7 and 8)
	LV160/320 WK-S	LV Multifunctional Adapter Female with tube and plug (incl pos 7 and 8)
	LV160/320 LV-P	Air Adapter SCHALTBAU DIN 160/320 Male
	LV160/320 LV-S	Air Adapter SCHALTBAU DIN 160/320 Female
	LV160/320 PA-P	Pilot Contact Adapter LV 160/320 Male
	LV160/320 PA-SW	Pilot Contact Adapter SCHALTBAU DIN 160/320 Female
	SCC-2.5-AG	Pilot Contact LV 160/320 Male
	BCC-2.5-AG	Pilot Contact LV 160/320 Female

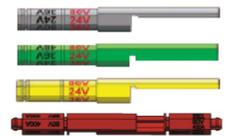
LV320/400 

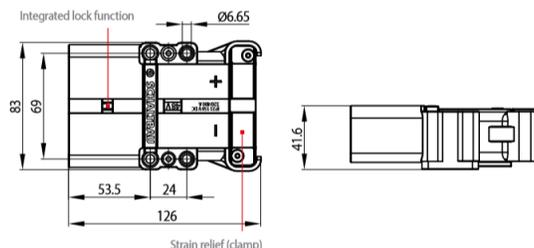


Female connector			
Item	Ordering code	Description	
1b	LV320/400 G-SP	Housing Shell LV320/400 - Female, incl. pilot contact adapter (10a)	
2	LV320/400 S	Locking Part "Schaltbau" for SCHALTBAU DIN 320/400	
3	LV320 D	Cable Clamp LV320/400	
4	LV SC 3.5X19 LV SC 3.5X25	Tapping Screw SC 3.5x19 for cable clamp LV 160/320 Tapping Screw SC 3.5x25 for cable clamp LV 320 95mm ²	
5	LV160/320-N-GR LV160/320-T-GN LV250/400-N-R-S	Coding Pin SCHALTBAU DIN 160/320 – gray Coding Pin SCHALTBAU DIN 160/320 – green Coding Pin SCHALTBAU DIN 250/400 – red	
6	LV500 S10/AWG4/0 LV320 S10/95 LV320 S10/70 LV320 S10/50	Main Contact SCHALTBAU DIN 500 Female – 120mm ² Main Contact SCHALTBAU DIN 320 Female – 95 mm ² Main Contact SCHALTBAU DIN 320 Female – 70 mm ² Main Contact SCHALTBAU DIN 320 Female – 50 mm ²	
9	LV320 BCC-2.5-AG	Auxiliary Contact SCHALTBAU DIN 320 Female	
11	BCC-2.5-AG	Pilot Contact SCHALTBAU LV160/320 Female	
13	LV160/320 P-S/S	Pilot Contact SCHALTBAU DIN 160/320 Female - 2 pieces, incl adapter (10a)	
15a	LV160/320 LV-S	Air Adapter SCHALTBAU DIN 160/320 Female	
15b	LV160/320 DS-LS	Spacer LV160/320	





Male connector			
Item	Ordering code	Description	
1a	LV320/400 G-P	Housing Shell LV320/400 - Male	
2	LV320/400 S	Locking Part "Schaltbau" for SCHALTBAU DIN 320/400	
3	LV320 D	Cable Clamp LV320/400	
4	LV SC 3.5X19 LV SC 3.5X25	Tapping Screw SC 3.5x19 for cable clamp LV 160/320 Tapping Screw SC 3.5x25 for cable clamp LV 320 95mm ²	
5	LV160/320-N-GR LV160/320-T-GN LV160/320-U-GE LV250/400-N-R-P	Coding Pin SCHALTBAU DIN 160/320 – gray Coding Pin SCHALTBAU DIN 160/320 – green Coding Pin SCHALTBAU DIN 160/320 – yellow (universal) Coding Pin SCHALTBAU DIN 250/400 – red	
7	LV500 P10/AWG4/0 LV320 P10/95 LV320 P10/70 LV320 P10/50	Main Contact SCHALTBAU DIN 500 Male – 120mm ² Main Contact SCHALTBAU DIN 320 Male – 95 mm ² Main Contact SCHALTBAU DIN 320 Male – 70 mm ² Main Contact SCHALTBAU DIN 320 Male – 50 mm ²	
9	LV320 SCC-2.5-AG	Auxiliary Contact SCHALTBAU DIN 320 Male	
12	SCC-2.5-AG	Pilot Contact SCHALTBAU LV160/320 Male	
14	LV160/320 P-P/S	Pilot Contact SCHALTBAU DIN 160/320 Male - 2 pieces, incl adapter (10b)	
15c	LV160/320 LV-P	Air Adapter SCHALTBAU DIN 160/320 Male	
15d	LV160/320 DS-LP	Spacer LV160/320	



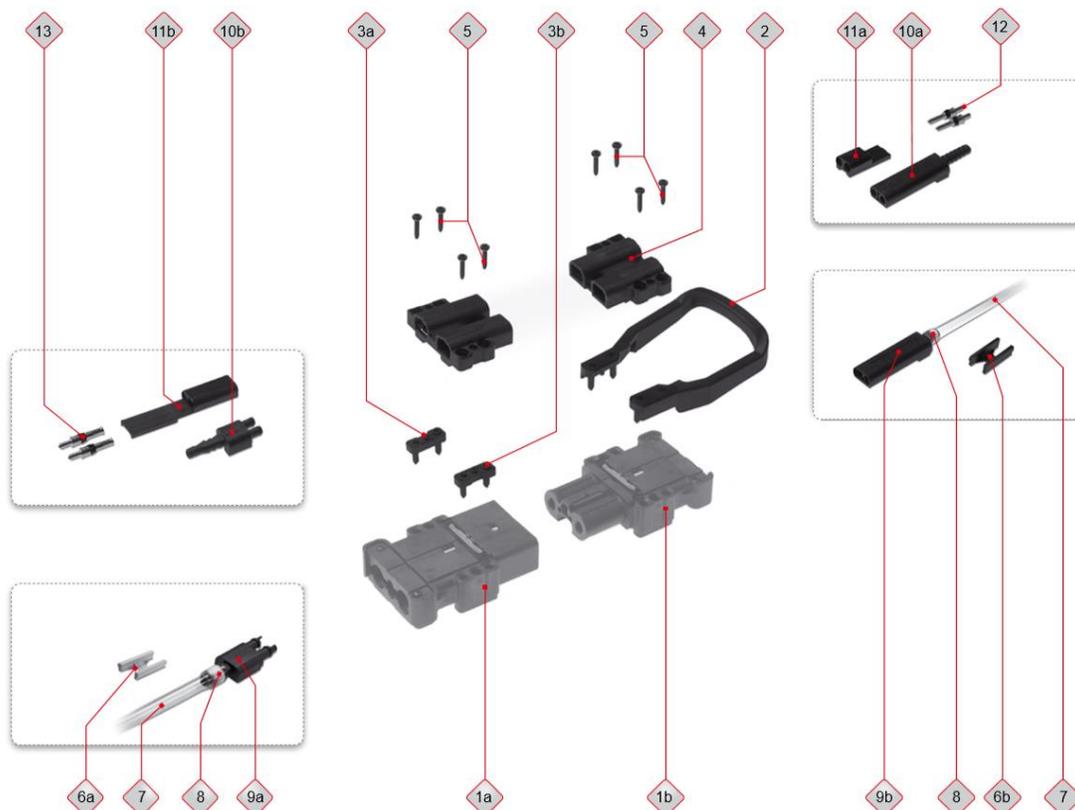
Ordering code

Example:

LV320/400-R-S50-0-2-L0-H3

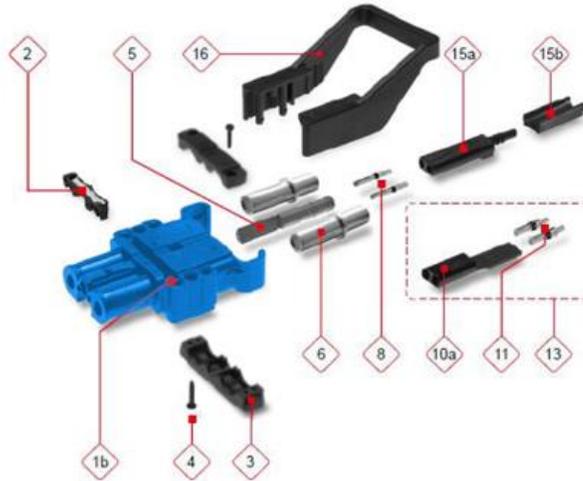
Series: _____ LV320/400									
Keying plug: _____ R – Red N – Gray T – Green U – Yellow (universal)									
Main contacts: _____ P4/0 – Pin 120 mm ² P95 – Pin 95mm ² P70 – Pin 70 mm ² P50 – Pin 50 mm ² S4/0 – Socket 120 mm ² S95 – Socket 95 mm ² S70 – Socket 70 mm ² S50 – Socket 50 mm ²									
Pilot contacts: _____ 0 – None 2 – 2 pilot contacts									
Aux. contacts: _____ 0 – None 2 – 2 aux. contacts									
Air tube adapter: _____ L0 – None L1 – Air tube adapter									
Handle: _____ H0 – None H1/S – Black, screw on H2/S – Red, screw on H3 – Black, snap on H4 – Red, snap on									

Accessories		
Picture	Ordering code	Description
	LV RH-70/50 LV RH-50/35	Reducing bushing SCHALTBAU 70 mm ² - 50 mm ² Reducing bushing SCHALTBAU 50 mm ² - 35 mm ²
	LV160/320 H3 LV160/320 H4	Snap-on handle SCHALTBAU LV 160/320 – black Snap-on handle SCHALTBAU LV 160/320 – red
	LV160/320 H1/S LV160/320 H2/S	Handle SCHALTBAU LV 160/320 with screws – black Handle SCHALTBAU LV 160/320 with screws – red
	Multifunctional adapters for LV160/320/500	See drawing and table below



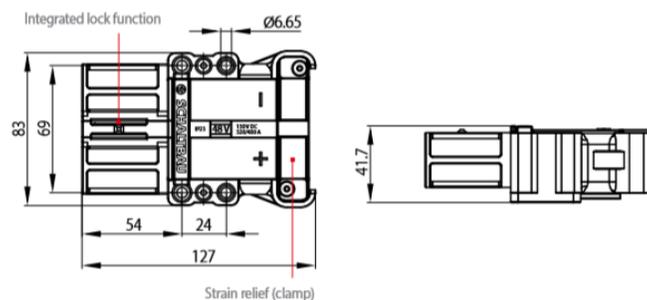
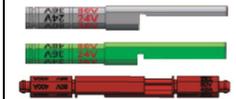
Accessories		
Picture	Ordering code	Description
	LV160/320 HW1 LV160/320 HW2	Handle for SCHALTBAU DIN 160/320 when central water module support is used, black Handle for SCHALTBAU DIN 160/320 when central water module support is used, red
	LV160/320 MA-L LV160/320 MA-R	Distance Piece Left Distance Piece Right
	LV160/320 MT-M	Auxiliary Module Support SCHALTBAU DIN 160/320 for central mounting
	LV SC 5.5X25	Tapping Screw SC 5,5x25 - black, galvanized
	LV160/320 DS-WP	Distance Piece for water module – Male
	LV160/320 DS-WS	Distance Piece for water module – Female
	LV160/320 WK-P	Water Module with tube SCHALTBAU DIN 160/320 and plug (incl pos 7 and 8)
	LV160/320 WK-S	LV Multifunctional Adapter Female with tube and plug (incl pos 7 and 8)
	LV160/320 LV-P	Air Adapter SCHALTBAU DIN 160/320 Male
	LV160/320 LV-S	Air Adapter SCHALTBAU DIN 160/320 Female
	LV160/320 PA-P	Pilot Contact Adapter LV 160/320 Male
	LV160/320 PA-SW	Pilot Contact Adapter SCHALTBAU DIN 160/320 Female
	SCC-2.5-AG	Pilot Contact LV 160/320 Male
	BCC-2.5-AG	Pilot Contact LV 160/320 Female

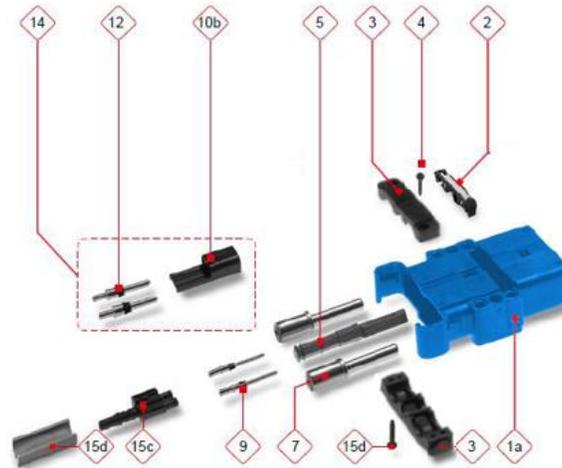
LV500 



Female connector

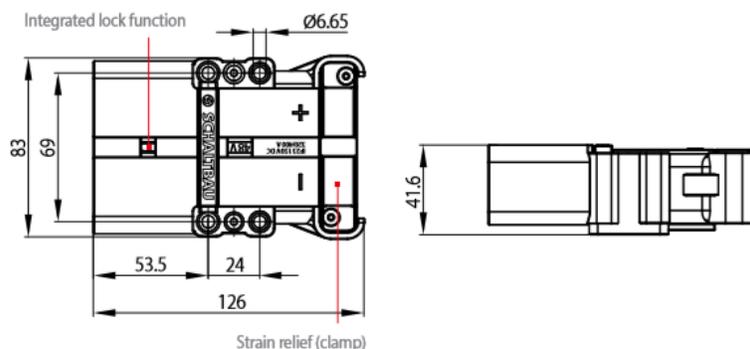
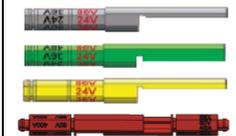
Item	Ordering code	Description
1b	LV500 G-S	Housing Shell LV500 - Female, incl. pilot contact adapter (10a)
2	LV320/400 S	Locking Part "Schaltbau" for SCHALTBAU DIN 320/400
3	LV500 D	Cable Clamp LV500
4	LV SC 3.5X25	Tapping Screw SC 3.5x25 for cable clamp LV 320 95mm ²
5	LV160/320-N-GR LV160/320-T-GN LV250/400-N-R-S	Coding Pin SCHALTBAU DIN 160/320 – gray Coding Pin SCHALTBAU DIN 160/320 – green Coding Pin SCHALTBAU DIN 250/400 – red
6	LV500 S10/AWG4/0	Main Contact SCHALTBAU DIN 500 Female – 120mm ²
8	LV320 BCC-2.5-AG	Auxiliary Contact SCHALTBAU DIN 320 Female
11	BCC-2.5-AG	Pilot Contact SCHALTBAU LV160/320 Female
13	LV160/320 P-S/S	Pilot Contact SCHALTBAU DIN 160/320 Female - 2 pieces, incl adapter (10a)
15a	LV160/320 LV-S	Air Adapter SCHALTBAU DIN 160/320 Female
15b	LV160/320 DS-LS	Spacer LV160/320





Male connector

Item	Ordering code	Description
1a	LV500 G-P	Housing Shell LV500 - Male
2	LV320/400 S	Locking Part "Schaltbau" for SCHALTBAU DIN 320/400
3	LV500 D	Cable Clamp LV320/400
4	LV SC 3.5X25	Tapping Screw SC 3.5x25 for cable clamp LV 320 95mm ²
5	LV160/320-N-GR LV160/320-T-GN LV160/320-U-GE LV250/400-N-R-P	Coding Pin SCHALTBAU DIN 160/320 – gray Coding Pin SCHALTBAU DIN 160/320 – green Coding Pin SCHALTBAU DIN 160/320 – yellow (universal) Coding Pin SCHALTBAU DIN 250/400 – red
7	LV500 P10/AWG4/0	Main Contact SCHALTBAU DIN 500 Male – 120mm ²
9	LV320 SCC-2.5-AG	Auxiliary Contact SCHALTBAU DIN 320 Male
12	SCC-2.5-AG	Pilot Contact SCHALTBAU LV160/320 Male
14	LV160/320 P-P/S	Pilot Contact SCHALTBAU DIN 160/320 Male - 2 pieces, incl adapter (10b)
15c	LV160/320 LV-P	Air Adapter SCHALTBAU DIN 160/320 Male
15d	LV160/320 DS-LP	Spacer LV160/320



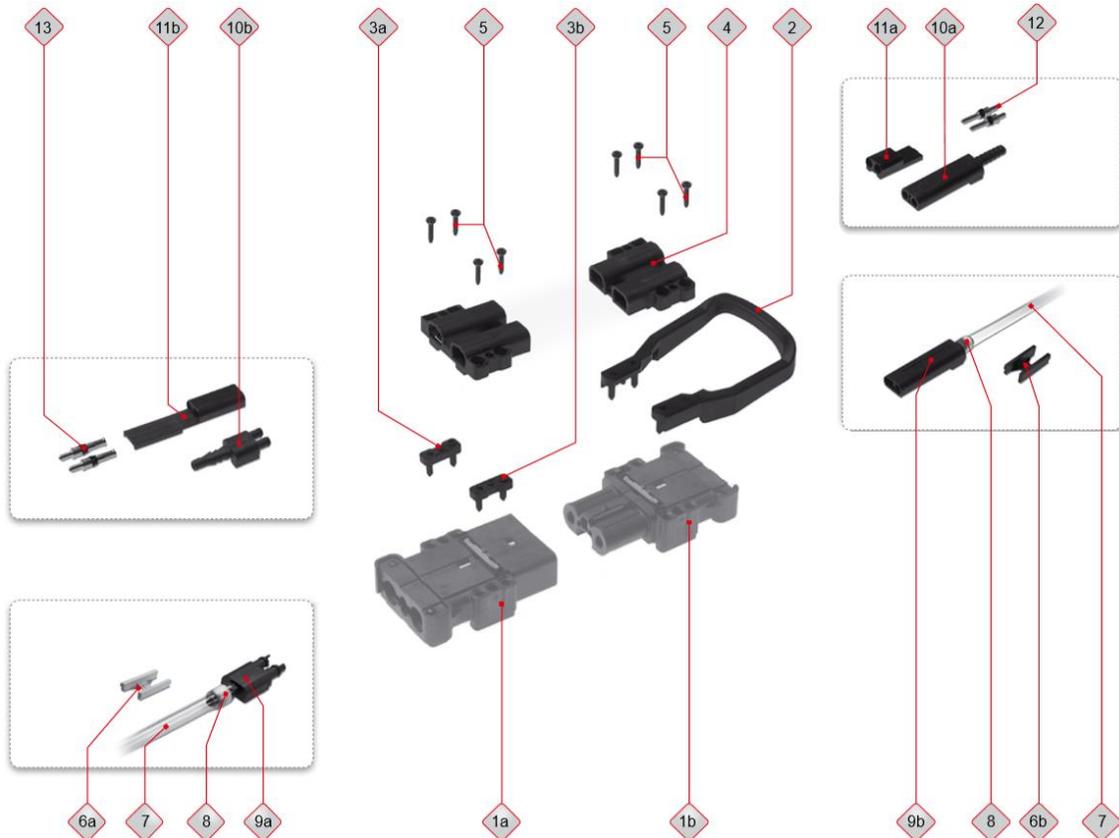
Ordering code

Example:

LV500-0-S4/0-0-2-L0-H3

Series: _____ LV500									
Keying plug: _____ 0 – None R – Red N – Gray T – Green U – Yellow (universal)									
Main contacts: _____ P4/0 – Pin 120 mm ² S4/0 – Socket 120 mm ²									
Pilot contacts: _____ 0 – None 2 – 2 pilot contacts									
Aux. contacts: _____ 0 – None 2 – 2 aux. contacts									
Air tube adapter: _____ L0 – None L1 – Air tube adapter									
Handle: _____ H0 – None H1/S – Black, screw on H2/S – Red, screw on H3 – Black, snap on H4 – Red, snap on									

Accessories		
Picture	Ordering code	Description
	LV160/320 H3 LV160/320 H4	Snap-on handle SCHALTBAU LV 160/320 – black Snap-on handle SCHALTBAU LV 160/320 – red
	LV160/320 H1/S LV160/320 H2/S	Handle SCHALTBAU LV 160/320 with screws – black Handle SCHALTBAU LV 160/320 with screws – red
	Multifunctional adapters for LV160/320/500	See drawing and table below



Accessories		
Picture	Ordering code	Description
	LV160/320 HW1 LV160/320 HW2	Handle for SCHALTBAU DIN 160/320 when central water module support is used, black Handle for SCHALTBAU DIN 160/320 when central water module support is used, red
	LV160/320 MA-L LV160/320 MA-R	Distance Piece Left Distance Piece Right
	LV160/320 MT-M	Auxiliary Module Support SCHALTBAU DIN 160/320 for central mounting
	LV SC 5.5X25	Tapping Screw SC 5,5x25 - black, galvanized
	LV160/320 DS-WP	Distance Piece for water module – Male
	LV160/320 DS-WS	Distance Piece for water module – Female
	LV160/320 WK-P	Water Module with tube SCHALTBAU DIN 160/320 and plug (incl pos 7 and 8)
	LV160/320 WK-S	LV Multifunctional Adapter Female with tube and plug (incl pos 7 and 8)
	LV160/320 LV-P	Air Adapter SCHALTBAU DIN 160/320 Male
	LV160/320 LV-S	Air Adapter SCHALTBAU DIN 160/320 Female
	LV160/320 PA-P	Pilot Contact Adapter LV 160/320 Male
	LV160/320 PA-SW	Pilot Contact Adapter SCHALTBAU DIN 160/320 Female
	SCC-2.5-AG	Pilot Contact LV 160/320 Male
	BCC-2.5-AG	Pilot Contact LV 160/320 Female

Conversion table

10 mm ²	8 AWG
16 mm ²	6 AWG
25 mm ²	4 AWG
35 mm ²	2 AWG
50 mm ²	1/0 AWG
70 mm ²	2/0 AWG
95 mm ²	3/0 AWG
120 mm ²	4/0 AWG
150 mm ²	300 MCM
240 mm ²	500 MCM