

## 2. Plug-type connections

### Cigarette lighters, power sockets and USB sockets


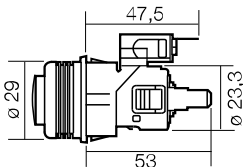


#### Purpose:

These products are used for various special applications. The power sockets are used to connect a variety of consumers such as lights, fans, cool boxes, phones, laptops, portable refrigerators and coffee makers. Cigarette lighters are offered in a variety of designs.

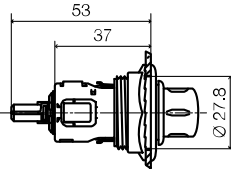
#### Advantages:

- Easy to assemble
- Screw thread and clamping sleeve
- Optionally with light
- 12 V and 24 V versions available
- Proven technology for OEMs

2.1 Cigarette lighters, power sockets and USB sockets	Description	Voltage	max. load-carrying capacity as socket	Part number	PU
 	<b>Universal cigarette lighter with light</b> type of connection: blade coupling 6.3 mm, fastened with a green clamping sleeve, pierced hole: Ø 28 mm, control panel thickness: max. 2.5 mm				
	Boxed	12 V	10 A	<b>8EZ 008 021-001</b>	1
	Boxed	24 V	5 A	<b>8EZ 008 021-011</b>	1

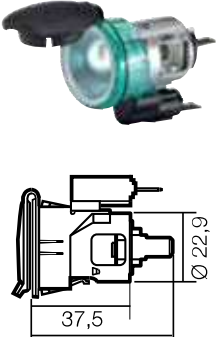
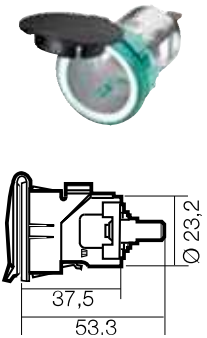
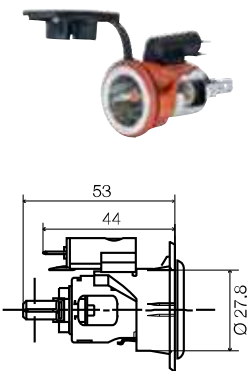
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### 2.1 Cigarette lighters and power sockets

2.1 Cigarette lighters, power sockets	Description	Voltage	max. load-carrying capacity as socket	Part number	PU
 	<b>Universal cigarette lighter without light</b> type of connection: blade coupling 6.3 mm, fastened with a lock washer, pierced hole: Ø 23.5 mm, control panel thickness: max. 2.5 mm				
	Boxed	12 V	10 A	<b>8EZ 008 022-001</b>	1
	Boxed	24 V	5 A	<b>8EZ 008 022-011</b>	1
 	<b>Universal SAE standard cigarette lighter with light</b> type of connection: blade coupling 6.3 mm, fastened with a red clamping sleeve, pierced hole: Ø 28 mm, control panel thickness: max. 2.0 mm				
	Boxed	12 V		<b>8EZ 008 021-021</b>	1
	Boxed	24 V		<b>8EZ 008 021-031</b>	1
 	<b>Universal SAE standard cigarette lighter without light</b> type of connection: blade coupling 6.3 mm, fastened with a hexagon nut, pierced hole: Ø 28 mm, control panel thickness: max. 2.0 mm				
	Boxed	12 V		<b>8EZ 008 021-041</b>	1
	Boxed	24 V		<b>8EZ 008 021-051</b>	1


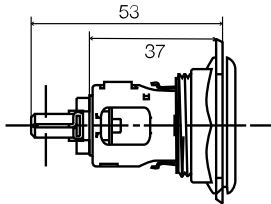

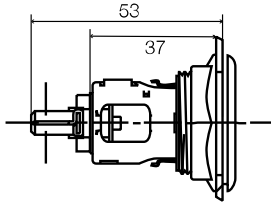


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### 2.1 Cigarette lighters and power sockets

2.1 Cigarette lighters, power sockets	Description	Voltage	max. load-carrying capacity as socket	Part number	PU
	<b>Power socket with light and cover</b>  Type of connection: blade coupling 6.3 mm, fixed using a green clamping sleeve, pierced hole: Ø 28 mm, control panel thickness: max. 2.5 mm with 12 V bulb installed, an additional bulb must be ordered for 24 V.				
	Boxed	12 V	15 A	<b>8JB 008 023-011</b>	1
	<b>Power socket unlit with cover</b>  Type of connection: blade coupling 6.3 mm, fixed using a green clamping sleeve, pierced hole: Ø 28 mm, control panel thickness: max. 2.5 mm				
	Boxed	12 / 24 V	15 A	<b>8JB 008 023-001</b>	1
	<b>Power socket with light and cover</b>  Connection: blade coupling 6.3 mm, fixed using a red clamping sleeve, pierced hole: Ø 28 mm, internal diameter: 21.0 mm				
	Boxed	12 V	20 A with a cable cross-section of 2.5 mm <sup>2</sup>	<b>8JB 008 023-021</b>	1
	Boxed	24 V	15 A with a cable cross-section of 1.5 mm <sup>2</sup>	<b>8JB 008 023-031</b>	1
	<b>Fixing by means of a green clamping sleeve</b>  Boxed	24 V		<b>8JB 008 023-041</b>	1

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### 2.1 Cigarette lighters and power sockets

2.1 Cigarette lighters and power sockets	Description	Voltage	max. load-carrying capacity as socket	Part number	PU
 	<b>Power socket unlit, with cover</b>  Connection: blade coupling 6.3 mm, fixed using a hexagon nut, red sleeve, pierced hole: Ø 28 mm, internal diameter: 21.0 mm	12 / 24 V	20 A with a cable cross-section of 2.5 mm <sup>2</sup> 15 A with a cable cross-section of 1.5 mm <sup>2</sup>	<b>8JB 008 023-051</b>	1
 	<b>Power socket unlit</b>  Connection: two blade couplings 6.3 mm, fixed using a black hexagon nut, black sleeve, pierced hole: Ø 28 mm, internal diameter: 21.0 mm cover not printed	12 / 24 V	20 A with a cable cross-section of 2.5 mm <sup>2</sup> 15 A with a cable cross-section of 1.5 mm <sup>2</sup>	<b>8JB 008 023-067</b>	160
	<b>USB socket for installation</b>  Connection: cable length: 15 cm, cable cross- section: 1.0 mm <sup>2</sup> , pierced hole: 27.8 mm ± 0.1 mm, panel thickness with threaded bush: 2 - 8 mm  <b>USB socket for installation</b> with mounting plate 60 x 44 mm	12 V	Input: 12 V ± 4 V, 800 mA Output: 5 V ± 0.25 VDC	<b>8JB 004 125-001</b>  <b>8JB 004 125-011</b>	1
	<b>Two power sockets:</b>  2-pole, max. 20 A with cable cross-section 2.5 mm <sup>2</sup> , max 15 A with cable cross-section 1.5 mm <sup>2</sup> internal diameter 21 mm, for universal plugs, with mounting plate 60 x 44 mm  <b>One USB socket for installation</b>  Connection: cable length: 15 cm, cable cross-section: 1.0 mm <sup>2</sup> , pierced hole: 27.8 mm ± 0.1 mm, panel thickness with threaded bush: 2 - 8 mm	12 V	Input: 12 V ± 4 V, 800 mA Output: 5 V ± 0.25 VDC	<b>8JB 004 123-061</b>	1

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### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65


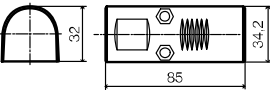

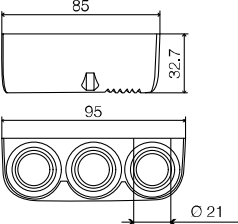


#### Purpose:

These products are used for various special applications. Depending on the version, the sockets can be installed both inside and outside the vehicle. The plug system compliant with ISO 4165 and the power sockets are used for the electrical connection of various consumers, such as lights, fans, cool boxes, phones, laptops, portable refrigerators and coffee maker.


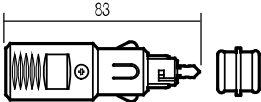

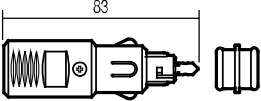
#### Advantages:

- Easy to assemble
- A number of different connection options (screw terminals and blade couplings)
- Sockets with and without cover
- Alloy and plastic designs available
- Sockets compliant with ISO 4165 available with polarity reversal protection through T-plug connection
- Extensions, battery monitors and adapters for consumers in the range

2.2.1 Universal plugs, sockets, adapters and couplings	Description	Connection	Part number	PU
 	<b>Surface-mount socket</b> 2-pole, no cover, plastic housing  internal diameter 21 mm, for universal plugs  load-carrying capacity: max. 20 A at 24 V (cable cross-section 2.5 mm <sup>2</sup> ) max. 15 A at 24 V (cable cross-section 1.5 mm <sup>2</sup> )  Boxed	2 flat plug connections - 6.3 mm	<b>8JB 004 123-042</b>	5
 	<b>Surface-mount three-way socket</b> 2-pole, plastic housing  internal diameter 21 mm, for universal plugs  load-carrying capacity: max. 20 A at 24 V (cable cross-section 2.5 mm <sup>2</sup> ) max. 15 A at 24 V (cable cross-section 1.5 mm <sup>2</sup> )  Polythene bag		<b>8JB 004 123-051</b>	1


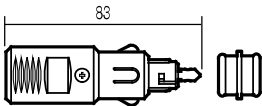

## 2. Plug-type connections

### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.1 Universal plugs, sockets, adapters and couplings	Description	Connection	Part number	PU
 	<p><b>Universal safety plug</b> with ducted strain relief, integrated replaceable 8 A fuse and pulling tool,</p> <p>cable opening 7 mm load-carrying capacity: max. 8 A at 6–24 V, cable cross-section around 0.75 mm<sup>2</sup></p> <p>Boxed</p> <p>Pro-fit packaging</p>	<p>2 screw terminals up to 2.5 mm<sup>2</sup></p> <p>2 screw terminals up to 2.5 mm<sup>2</sup></p>	<p><b>8JA 007 589-001</b></p> <p><b>8JA 007 589-002</b></p>	<p>10</p> <p>1</p>
 	<p><b>Universal safety plug</b> with LED and screwed strain relief, integrated replaceable 8 A fuse and pulling tool,</p> <p>cable opening 7 mm load-carrying capacity: max. 8 A at 6–24 V</p> <p>Boxed</p> <p>Pro-fit packaging</p>	<p>2 screw terminals up to 2.5 mm<sup>2</sup></p> <p>2 screw terminals up to 2.5 mm<sup>2</sup></p>	<p><b>8JA 007 589-032</b></p> <p><b>8JA 007 589-031</b></p>	<p>10</p> <p>1</p>


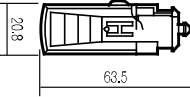

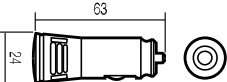

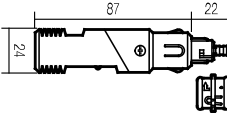

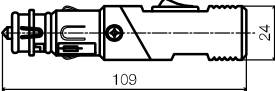
## 2. Plug-type connections

### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.1 Universal plugs, sockets, adapters and couplings	Description	Connection	Part number	PU
 	<p><b>Universal safety plug</b> with screwed strain relief, no fuse, with pulling tool, cable opening 7 mm</p> <p><b>Load-carrying capacity: 8 A at 24 V</b></p> <p>Boxed</p> <p><b>Load-carrying capacity: 16 A at 24 V</b></p> <p>Boxed</p>	<p>2 screw terminals up to 2.5 mm<sup>2</sup></p> <p>2 screw terminals up to 2.5 mm<sup>2</sup></p>	<p><b>8JA 007 589-011</b></p> <p><b>8JA 007 589-021</b></p>	<p>10</p> <p>10</p>
 	<p><b>Universal economy plug</b> cable opening: 5 x 3 mm load-carrying capacity: max. 8 A at 6–24 V</p> <p>Boxed</p> <p>Pro-fit packaging</p>	<p>2 screw terminals up to 2.5 mm<sup>2</sup></p> <p>2 screw terminals up to 2.5 mm<sup>2</sup></p>	<p><b>8JA 002 252-103</b></p> <p><b>8JA 002 252-101</b></p>	<p>12</p> <p>1</p>
 	<p><b>Universal economy plug</b> cable opening: Ø 8 mm load-carrying capacity: max. 8 A at 6–24 V</p> <p>Boxed</p>	<p>2 screw terminals up to 2.5 mm<sup>2</sup></p>	<p><b>8JA 001 921-102</b></p>	<p>12</p>

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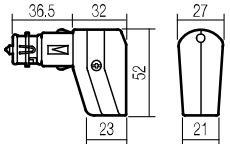



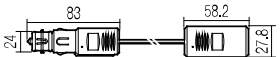


### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.1 Universal plugs, sockets, adapters and couplings	Description	Connection	Part number	PU
 	<b>Universal economy plug</b> with ducted strain relief  cable opening: 5 x 3 mm  Boxed	2 screw terminals up to 2.5 mm <sup>2</sup>	<b>8JA 007 158-001</b>	1
 	<b>Universal economy plug</b> with ducted strain relief  cable opening: Ø 8 mm  Boxed	2 screw terminals up to 2.5 mm <sup>2</sup>	<b>8JA 004 667-001</b>	10
 	<b>Universal right-angle plug</b> with screwed strain relief, with integrated, replaceable 8 A fuse, can be pivoted completely through 180°, with sufficient space for electronics  (dimensions for circuit board: 28.5 x 26.5 x 1.5 mm)  Boxed  Pro-fit packaging	2 screw terminals up to 2.5 mm <sup>2</sup>  2 screw terminals up to 2.5 mm <sup>2</sup>	<b>8JA 007 589-042</b>  <b>8JA 007 589-041</b>	8  1
 	<b>Universal right-angle plug</b> with screw-type strain relief, printed 0-I rocker switch and integrated, replaceable 8 A fuse, can be pivoted completely through 180°  Boxed	2 screw terminals up to 1.5 mm <sup>2</sup>	<b>8JA 007 589-152</b>	8



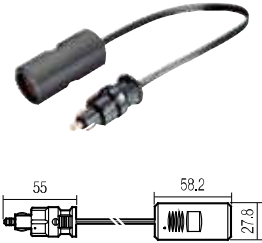
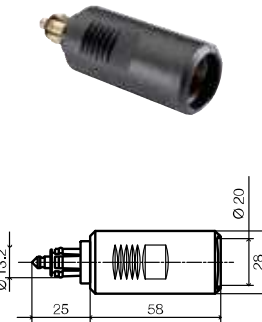
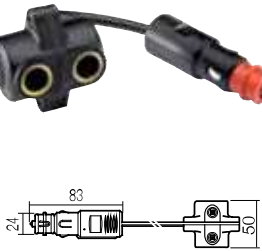
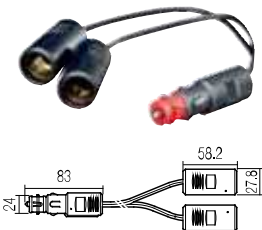
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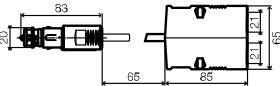


### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.1 Universal plugs, sockets, adapters and couplings	Description	Connection/length	Part number	PU
 	<b>Universal right-angle plug</b> with screw-type strain relief, integrated 7.5 A ATO blade-type fuse and LED function check  Boxed	2 screw terminals up to 1.5 mm <sup>2</sup>	<b>8JA 007 589-052</b>	8
 	<b>Cable</b> for adapting standard and cigarette lighter sockets to standard sockets  Cable: 2 x 0.75 mm <sup>2</sup> Universal safety plug with integrated 8 A fuse load-carrying capacity: max. 8 A at 24 V  Polythene bag	4.0 m	<b>8KA 007 589-071</b>	1
 	<b>Extension cable</b> for adapting standard and cigarette lighter sockets to cigarette lighter connectors  Cable: 2 x 0.75 mm <sup>2</sup> Universal safety plug with integrated 8 A fuse load-carrying capacity: max. 8 A at 24 V  Polythene bag	4.0 m	<b>8KA 007 589-081</b>	1
 	<b>Helical extension cable</b> for adapting standard and cigarette lighter sockets to cigarette lighter connectors  Cable: 2 x 0.75 mm <sup>2</sup> Universal safety plug with integrated 8 A fuse load-carrying capacity: max. 8 A at 24 V  Polythene bag  Pro-fit packaging	0.6 – 3.0m  0.6 – 3.0m	<b>8KA 007 589-091</b>  <b>8KA 007 589-092</b>	1  1

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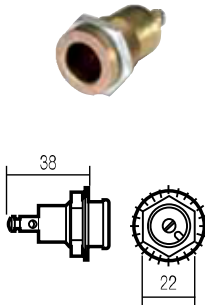
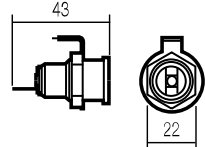
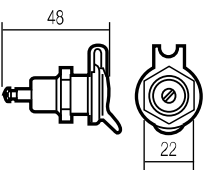
### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.1 Universal plugs, sockets, adapters and couplings	Description	Length	Part number	PU
 <p><b>Adapter cable</b> for adapting standard sockets to cigarette lighter connectors</p> <p>Cable: 2 x 0.75 mm<sup>2</sup> load-carrying capacity: max. 8 A at 24 V</p> <p>Polythene bag</p> <p>Pro-fit packaging</p>	<p><b>Adapter</b> for adapting standard sockets to cigarette lighter connectors.</p> <p>Load-carrying capacity: max. 16 A at 12 / 24 V</p> <p>Polythene bag</p> <p>Pro-fit packaging</p>	<p>0.25 m</p> <p>0.25 m</p>	<p><b>8KA 007 589-101</b></p> <p><b>8KA 007 589-102</b></p>	<p>1</p> <p>1</p>
 <p><b>Adapter</b> for adapting standard sockets to cigarette lighter connectors.</p> <p>Load-carrying capacity: max. 16 A at 12 / 24 V</p> <p>Polythene bag</p>		<p>93 mm</p>	<p><b>8KA 007 589-131</b></p>	<p>1</p>
 <p><b>Adapter cable</b> for adapting standard and cigarette lighter sockets to two standard sockets</p> <p>Cable: 2 x 0.75 mm<sup>2</sup> Universal safety plug with integrated 8 A fuse load-carrying capacity: max. 8 A at 24 V</p> <p>Pro-fit packaging</p>		<p>0.12 m</p>	<p><b>8JB 008 032-001</b></p>	
 <p><b>Twin coupling</b> for adapting standard and cigarette lighter sockets to two cigarette lighter connectors</p> <p>Cable: 2 x 0.75 mm<sup>2</sup> Universal safety plug with integrated 16 A fuse load-carrying capacity: max. 2 x 8 A at 24 V</p> <p>Polythene bag</p> <p>Pro-fit packaging</p>		<p>0.25 m</p> <p>0.25 m</p>	<p><b>8JA 007 589-111</b></p> <p><b>8JA 007 589-112</b></p>	<p>1</p> <p>1</p>

2.2.1 Universal plugs, sockets, adapters and couplings	Description	Length	Part number	PU
 	<p><b>Twin coupling</b> for adapting standard or cigarette lighter sockets to two cigarette lighter connectors</p> <p>load-carrying capacity: max.16 A at 12 / 24 V</p> <p>Polythene bag</p>	65 mm	8JA 007 589-141	1
 	<p><b>Battery monitor</b> – protects the battery from total discharge by switching consumers off in good time, e.g. cool boxes, seat heating, fans and other mobile 12 V devices when voltage is low. Automatic switch-on once operating voltage returns to normal level.</p> <p>Cable: 2 x 0.75 mm<sup>2</sup> suitable for standard and cigarette lighter sockets, LED function control and short-circuit protection</p> <p>load-carrying capacity: max. 8 A at 12 V</p> <p>Polythene bag</p>	1.0 m	8ES 007 589-121	1

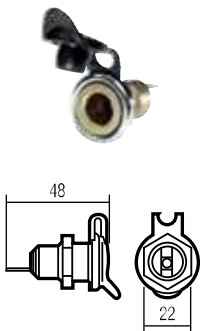
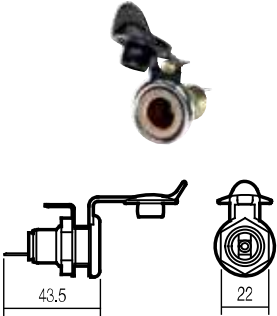
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### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.2 2-pole plug system compliant with ISO 4165	Description	Connection	Part number	PU
<b>Socket compliant with ISO 4165, light-weight metal</b> pierced hole: Ø 18.5 mm control panel thickness: max. 7 mm load-carrying capacity: max. 8 A at 24 V				
	<b>Standard socket</b> 2-pole          Boxed	          1 screw terminal, earth on the housing	          <b>8JB 001 946-031</b>	          10
	<b>Standard socket</b> 2-pole, with additional earth plug          Boxed	          2 flat plug connections - 6.3 mm	          <b>8JB 001 946-041</b>	          10
	<b>Standard socket</b> 2-pole, with cover          Boxed   Pro-fit packaging	          1 screw terminal, earth on the housing   1 screw terminal, earth on the housing	          <b>8JB 001 946-021</b>   <b>8JB 001 946-022</b>	          10   1

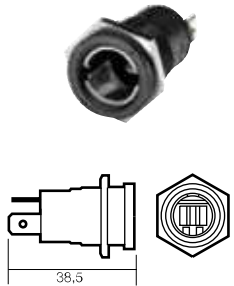
## 2. Plug-type connections

### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.2 2-pole plug system compliant with ISO 4165	Description	Connection	Part number	PU
 <p><b>Socket</b> 2-pole, with cover</p> <p>Boxed</p>		1 blade coupling 6.3 mm, earth on the housing	<b>8JB 001 946-011</b>	10
 <p><b>Socket</b> 2-pole, with cover and additional earth plug</p> <p>Boxed</p>		2 flat plug connections - 6.3 mm	<b>8JB 001 946-051</b>	10


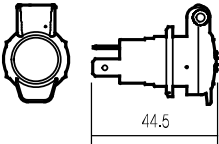
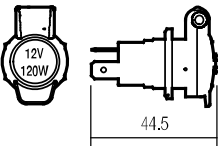

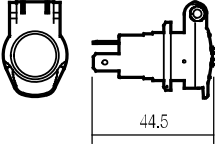

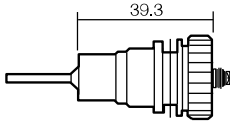

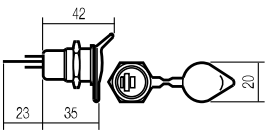
#### Socket compliant with ISO 4165, plastic housing

polarity reversal protection through T-plug connection, recommended female connector housing 8JD 008 152-021 (10 pcs.), recommended blade terminal sleeves 8KW 701 235-033 (100 pcs.), pierced hole: Ø 18.5 mm, control panel thickness: max. 7 mm, load-carrying capacity: max. 16 A at 6 – 24 V

 <p><b>Socket</b> 2-pole, without cover</p> <p>Boxed</p>		2 flat plug connections - 6.3 mm	<b>8JB 001 946-072</b>	10
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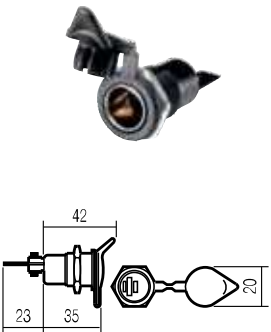

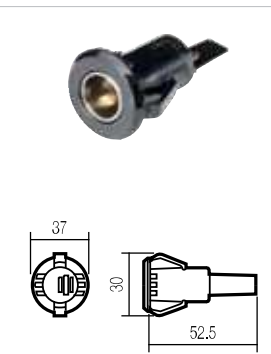
## 2. Plug connections

### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.2 2-pole plug system compliant with ISO 4165	Description	Connection	Part number	PU
  	<b>Socket</b> 2-pole, with snap cover, cover does not latch, load-carrying capacity max. 16 A at 6 – 24 V	2 flat plug connections – 6.3 mm	<b>8JB 001 946-082</b>  <b>8JB 001 946-127</b>	10  50
 	<b>Socket</b> 2-pole, with arresting cover, (the cover remains in place when opened, the catch is released on insertion so that the cover automatically closes when the plug is removed.) load-carrying capacity max. 16 A at 6 – 24 V	2 flat plug connections – 6.3 mm	<b>8JB 001 946-092</b>	10
 	<b>Socket</b> 2-pole, watertight as per IP 67, with unloseable cover, 300 mm lead 2.5 mm <sup>2</sup> , ideally suited for use in boats and near motors  temperature range: –40°C to +105 °C	Blade contact and earth sleeve	<b>8JB 001 946-101</b>	1
 	<b>Socket</b> 2-pole, with cover	2 flat plug connections – 6.3 mm  2 flat plug connections – 6.3 mm	<b>8JB 004 777-001</b>  <b>8JB 004 777-002</b>	5  1

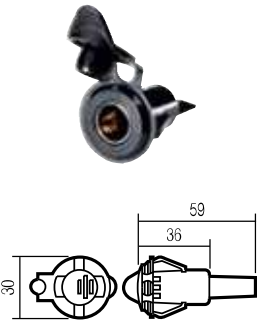

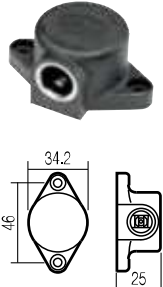
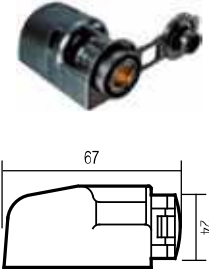
## 2. Plug-type connections

### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.2 2-pole plug system compliant with ISO 4165	Description	Connection	Part number	PU
 <p><b>Socket</b> 2-pole, with cover</p> <p>Boxed</p>		2 screw terminals	<b>8JB 004 777-011</b>	5
 <p><b>Coupling</b> for setting up individual extensions for a power supply to electric appliances and lights.  load-carrying capacity: max. 16 A at 24 V</p> <p>Pro-fit packaging</p> <p>Boxed</p>		2 flat plug connections - 6.3 mm	<b>8JA 007 589-061</b>	1
 <p><b>Socket</b> 2-pole, without cover  control panel thickness: max. 3 mm pierced hole: Ø 23 mm load-carrying capacity: max. 8 A at 6 V – 24 V</p> <p>Boxed</p>		2 flat plug connections 6.3 mm	<b>8JB 002 286-021</b>	10

## 2. Plug-type connections

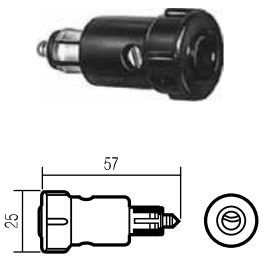
### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.2 2-pole plug system compliant with ISO 4165	Description	Connection	Part number	PU
 <p><b>Socket</b> 2-pole, with cover</p> <p>control panel thickness: max. 2 mm pierced hole: Ø 23 mm load-carrying capacity: max. 8 A at 6 V – 24 V</p> <p>Boxed</p>		2 flat plug connections – 6.3 mm	<b>8JB 002 286-031</b>	10
 <p><b>Surface-mount socket</b> 2-pole, without cover, plastic housing</p> <p>contacts CuZn</p> <p>Boxed</p> <p>Pro-fit packaging</p>		2 screw terminals	<b>8JB 004 123-001</b>	5
 <p><b>Surface-mount socket</b> 2-pole, without cover, plastic housing, designed to be resistant to seawater</p> <p>contacts CuZn nickel plated</p> <p>Boxed</p>		2 screw terminals	<b>8JB 004 123-012</b>	5
 <p><b>Surface-mount socket</b> 2-pole, with cover, plastic housing</p> <p>Boxed</p> <p>Pro-fit packaging</p>		2 flat plug connections – 6.3 mm	<b>8JB 004 123-032</b>	5
		2 flat plug connections – 6.3 mm	<b>8JB 004 123-031</b>	1



## 2. Plug-type connections

### 2.2 Universal plug-type connections / 2-pole plug system compliant with ISO 41 65

2.2.2 2-pole plug system compliant with ISO 4165	Description	Connection	Part number	PU
<b>Plug compliant with ISO 4165, plastic design</b>				
	Plug without strain relief  cable opening: Ø 9.2 mm load-carrying capacity: max. 18 A at 24 V			
	Boxed	2 screw terminals up to 2.5 mm <sup>2</sup>	<b>8JA 002 262-001</b>	10
	Pro-fit packaging	2 screw terminals up to 2.5 mm <sup>2</sup>	<b>8JA 002 262-003</b>	1
	Plug with screw-type strain relief  cable opening: Ø 9.2 mm load-carrying capacity: max. 18 A at 24 V			
	Boxed	2 screw terminals up to 2.5 mm <sup>2</sup>	<b>8JA 001 915-001</b>	10
	Plug without strain relief  cable opening: Ø 7.5 mm load-carrying capacity: max. 15 A at 24 V			
	Boxed	2 screw terminals	<b>8JA 001 915-022</b>	10
	Plug with solder contacts and ducted strain relief  cable opening: Ø 7.5 mm load-carrying capacity: max. 8 A at 24 V			
	Boxed	2 solder contacts	<b>8JA 001 915-032</b>	10