



# Accessories

All HELLA products are extensively tested for quality, durability and function.

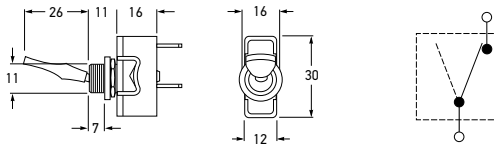


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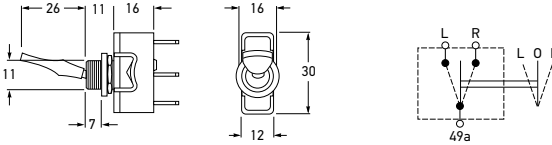
**Toggle Switch - Off-On**



<b>6EH 905 361-022</b>	<b>4456</b>		<b>OFF-ON</b>
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

**Toggle Switch - On-Off-On**

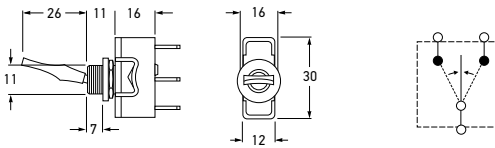
Toggle switch, suitable for controlling direction indicator lamps.



<b>6FG 905 346-002</b>	<b>4202</b>		<b>ON-OFF-ON</b>
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

**Momentary Spring Return Switch - (On)-Off-(On)**

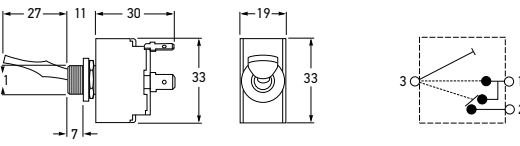
Momentary on-off-on, spring return aerial switch. Flick toggle with spring return to centre.



<b>6EH 905 361-032</b>	<b>4460</b>		<b>(ON)-OFF-(ON)</b>
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

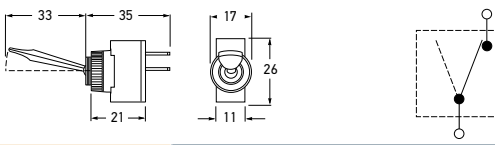
**Headlamp Switch - Off-On-On**

Three position switch:  
Upper = Off  
Centre = Position lamps  
Lower = Headlamps and position lamps



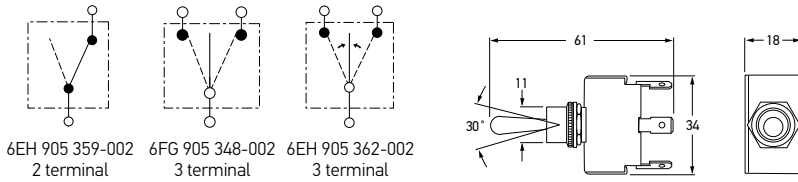
<b>6FG 905 343-012</b>	<b>4056</b>		<b>OFF-ON-ON</b>
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	20A @ 12V 10A @ 24V		

**Plastic Toggle Switch**



<b>6EH 905 361-002</b>	<b>4453</b>		<b>OFF-ON</b>
Mounting	13mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	8A @ 12V		

ACCESSORIES

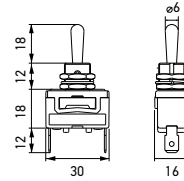


<b>6EH 905 359-002</b>	<b>4451</b>		<b>OFF-ON</b>
<b>6FG 905 348-002</b>	<b>4302</b>		<b>ON-OFF-ON</b>
<b>6EH 905 362-002</b>	<b>4461 (Momentary spring return)</b>		<b>(ON)-OFF-(ON)</b>
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	20A @ 12V 10A @ 24V		

Metal Shaft Toggle Switch



6EH 905 359-002



<b>6EH 905 361-101</b>	<b>4203</b>		<b>OFF-ON</b>
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		

Metal Shaft Toggle Switch - Off-On

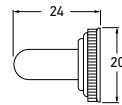


Aircraft Style Switch Cover - Red

Red aircraft style switch cover to prevent accidental switch operation.



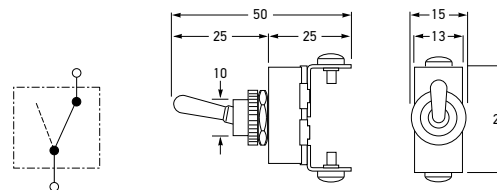
<b>9HB 905 360-101</b>	<b>4455</b>		<b>RED</b>
To Suit	6EH 905 359-002 6EH 905 361-101		



<b>6EH 905 360-002</b>	<b>4452</b>		
<b>6EH 905 360-007</b>	<b>4452BULK</b>		<b>PACK OF 10</b>
To Suit	Toggle switch 6FG 905 348-002 6EH 905 359-002 6EH 905 362-002		

Toggle Boot

To be used with toggle switches.



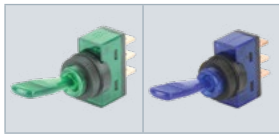
<b>6EG 905 310-002</b>	<b>2762</b>		<b>OFF-ON</b>
Mounting	11mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	15A @ 12V 7.5A @ 24V		
Toggle boot 6EH 905 360-002 does not fit this switch.			

Brass Toggle Switch - Off-On

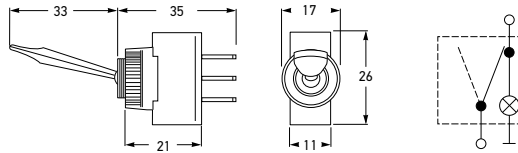
Chrome toggle and face nut. Brass construction.



**Illuminated Toggle Switch,  
Off-On - 12 Volt**



6EG 905 354-012 6EG 905 354-032

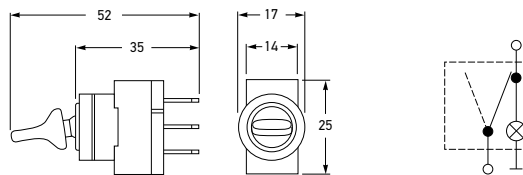


<b>6EG 905 354-002</b>	4433		RED
<b>6EG 905 354-012</b>	4434		GREEN
<b>6EG 905 354-032</b>	4436		BLUE
Mounting	12.5mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

**Illuminated Duckbill Switch,  
Off-On - 12 Volt**

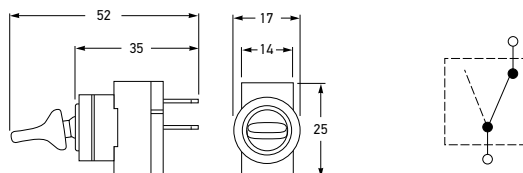


6EG 905 351-032 6EG 905 351-042



<b>6EG 905 351-012</b>	4421		RED
<b>6EG 905 351-032</b>	4423		BLUE
<b>6EG 905 351-042</b>	4424		AMBER
Mounting	12.5mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

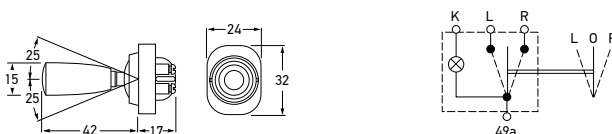
**Duckbill Switch**



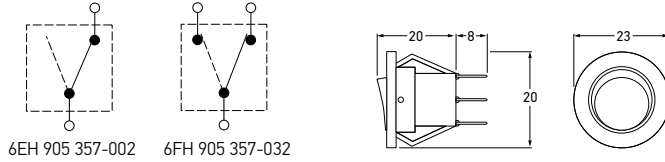
<b>6EG 905 351-002</b>	4420		OFF-ON
Mounting	12.5mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V	5A @ 24V	

**Illuminated Toggle Switch,  
On-Off-On**

Three position latching switch for indicators.  
Illuminates green.



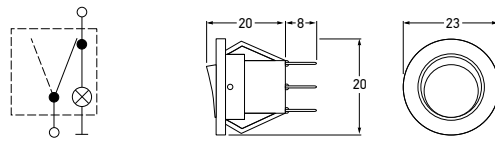
<b>6FG 905 347-002</b>	4206		ON-OFF-ON
Mounting	19mm diameter opening.		
For Panels	Up to 2mm thick.		
Maximum Load	6A @ 12V		
Bulb to Suit	12V	8GP 002 095-081	



<b>6EH 905 357-002</b>	<b>4444</b>		<b>OFF-ON</b>
<b>6FH 905 357-032</b>	<b>4447</b>		<b>ON-ON</b>
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		

**Rocker Switch**

Panel push fit.



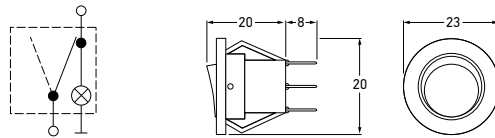
<b>6EH 905 357-012</b>	<b>4445</b>		<b>AMBER</b>
<b>6EH 905 357-022</b>	<b>4446</b>		<b>RED</b>
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

**Illuminated Rocker Switch, Off-On - 12 Volt**

Panel push fit.



6EH 905 357-022



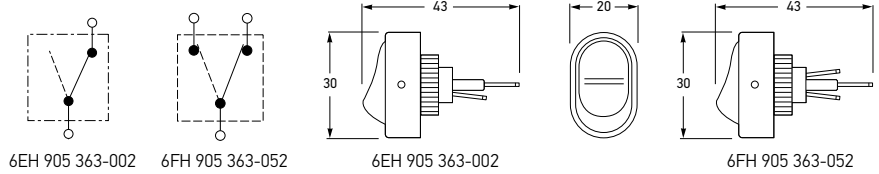
<b>6EH 905 357-042</b>	<b>4448</b>		<b>RED</b>
Mounting	20mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. LED included, not replaceable.			

**LED Rocker Switch, Off-On - 12 Volt**

Panel push fit.

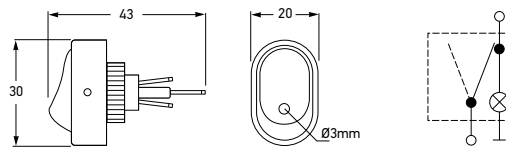


Rocker Switch



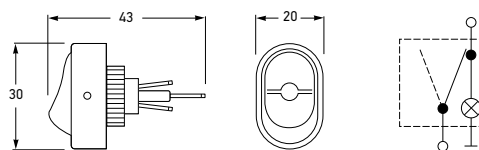
<b>6EH 905 363-002</b>	<b>4470</b>		<b>OFF-ON</b>
<b>6FH 905 363-052</b>	<b>4475</b>		<b>ON-ON</b>
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	10A @ 12V		

LED Rocker Switch, Off-On  
- 12 Volt



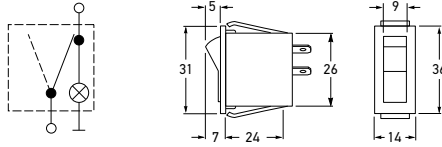
<b>6FH 905 363-092</b>	<b>4479</b>		<b>AMBER</b>
<b>6FH 905 363-112</b>	<b>4481</b>		<b>RED</b>
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. LED included, not replaceable.			

Illuminated Rocker Switch,  
Off-On - 12 Volt



<b>6EH 905 363-012</b>	<b>4471</b>		<b>AMBER</b>
Mounting	12mm diameter opening.		
For Panels	Up to 5mm thick.		
Maximum Load	10A @ 12V		
Suitable for 12V only. Bulb not replaceable.			

ACCESSORIES



**Illuminated Rocker Switch, Off-On - 12 Volt**

Panel push fit.



<b>6EH 905 352-012</b>	<b>4427</b>		<b>RED</b>
<b>6EH 905 352-022</b>	<b>4428</b>		<b>GREEN</b>
<b>6EH 905 352-032</b>	<b>4429</b>		<b>BLUE</b>
<b>6EH 905 352-042</b>	<b>4430</b>		<b>AMBER</b>

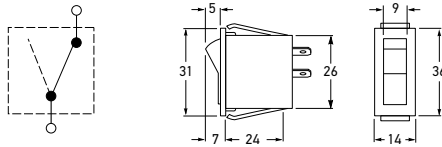
Mounting 29 x 12mm opening.

Maximum Load 10A @ 12V

Suitable for 12V only. Bulb not replaceable.



6EH 905 352-022 6EH 905 352-032 6EH 905 352-042



**Rocker Switch - Off-On**

Panel push fit.



<b>6EH 905 352-002</b>	<b>4426</b>		<b>OFF-ON</b>
Mounting	29 x 12mm opening.		
Maximum Load	10A @ 12V 5A @ 24V		

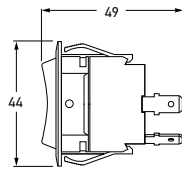


**Heavy Duty Rocker Switch**

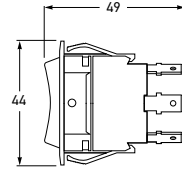
Extremely robust rocker switch featuring push-on terminals and weather resistant black plastic housing. Panel push fit.



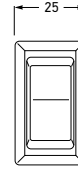
6FH 905 364-012



6FH 905 364-002



6FH 905 364-012 & 6GH 905 364-022

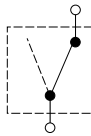


<b>6FH 905 364-002</b>	4482		OFF-ON
<b>6FH 905 364-012</b>	4483		ON-OFF-ON
<b>6GH 905 364-022</b>	4484 (Momentary spring return)		(ON)-OFF-(ON)

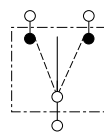
Mounting 20 x 36mm opening.

For Panels Up to 4mm thick.

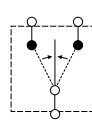
Maximum Load 25A @ 12V  
12.5A @ 24V



6FH 905 364-002



6FH 905 364-012



6GH 905 364-022

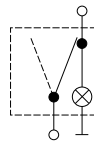
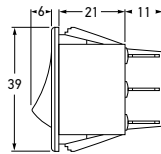
**LED Illuminated Rocker Switch, Off-On - 12 Volt**

Panel push fit.



6EH 980 321-011

6EH 980 321-021



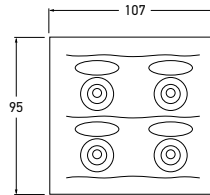
<b>6EH 980 321-001</b>	4486A		AMBER
<b>6EH 980 321-011</b>	4486G		GREEN
<b>6EH 980 321-021</b>	4486R		RED

Mounting 20 x 35mm opening.

For Panels Up to 4mm thick.

Maximum Load 10A @ 12V

Suitable for 12V only. LED included, not replaceable.

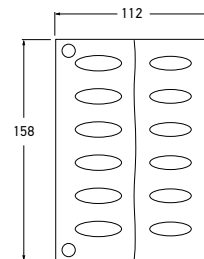


### Compact Switch Panel

Splash proof switch panel protected with neoprene rubber boots. Inline fuse holders with fuses behind panel.



8HG 998 514-042	2690 (4 way)		OFF-ON
8HG 998 514-052	2691 (6 way)		
Housing	Impact resistant plastic.		
Switches	4 or 6 off-on toggle switches.		
Maximum Load	20A @ 12V		



### Switch Panel, LED Backlight

Splash proof switch panel featuring LED backlit labels. Protected by neoprene rubber boots. Removable cover plate over switches conceals screws.



8HG 998 514-002	2692 (6 way)		OFF-ON
Voltage	Multivolt™, suitable for 12 and 24 volt systems.		
Housing	Impact resistant plastic.		
Switches	6 off-on toggle switches.		
Maximum Load	20A @ 12V		

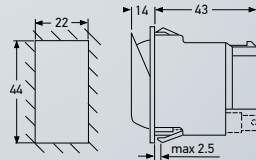
## HELLA Universal Rocker Switches

HELLA universal flush-fit rocker switches are readily adaptable to 12 and 24V applications. This large and varied range covers nearly all switching types and connections. A wide selection of symbols ensures proper labelling of all main switching and monitoring functions. The switching and control displays can be illuminated.

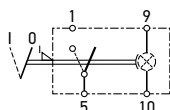
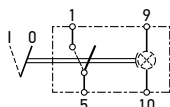
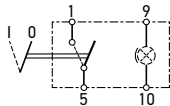


Mounting	Mounted directly to properly dimensioned opening (1 - 2.5mm thick) or by mounting panels (for more information see page 218).
Maximum Load	16A @ 12V, 8A @ 24V.

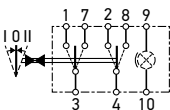
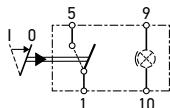
Connectors, symbols, mounts and bulb holders are to be purchased separately.



Location lamp illuminates lamp with park lights. Pilot lamp illuminates when switch is in the 'on' position.

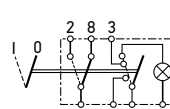
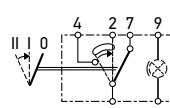
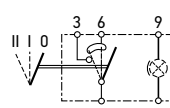
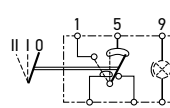
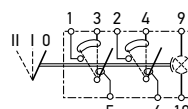
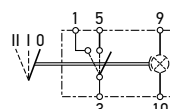
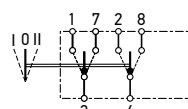
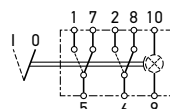
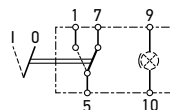


ON-OFF SWITCHES			
Part Number	Symbol	Description	Function
6EH 007 832-011	LOCATION	Suitable for use with location light.	ON-OFF
6EH 007 832-021	PILOT	Suitable for use with location and pilot light.	
	LOCATION		
6EH 007 832-041	PILOT	With mechanism for blocking operation. Suitable for use with location light and pilot light.	
	LOCATION		



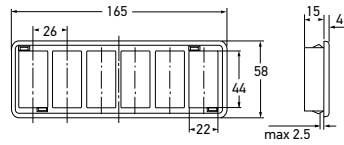
MOMENTARY SPRING RETURN SWITCHES			
6GM 007 832-191	LOCATION	Suitable for use with location light.	OFF-(ON)
6GM 007 832-251	LOCATION	Suitable for use with location light.	(ON)-OFF-(ON)

CHANGE-OVER SWITCHES			
Part Number	Symbol	Description	Function
6FH 007 832-061	LOCATION	Suitable for use with location light.	ON-ON
6FH 007 832-101	PILOT LOCATION	Suitable for use with location light and pilot light.	
6FH 007 832-161		Without location light, without pilot light.	ON-OFF-ON
6RH 007 832-351	PILOT LOCATION	Suitable for use with location light and pilot light.	OFF-ON-ON
6RH 007 832-377	PILOT LOCATION	Suitable for use with location light and pilot light.	
6RH 007 832-391	LOCATION	Max. load 16A @ 12V, 8A @ 24V. Suitable for use with location light, without pilot light.	
6RH 007 832-441	LOCATION	Suitable for use with location light.	
6RH 007 832-411	LOCATION	Suitable for use with location light.	
6HH 007 832-281	PILOT	Max. load 10A @ 12V and 24V. Without location light. Includes pre-fitted 12V bulb. Hazard flasher switch.	HAZARD

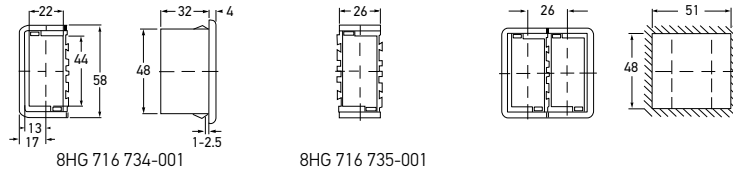


See page 219 for the range of coloured symbols.

Accessories for Switches in Model Range 007 832-...



MOUNTING PANELS		
8HG 713 626-001	(156.1 x 48.2mm)	SIX SWITCHES
8HG 714 504-001	(77.6 x 48.2mm)	THREE SWITCHES



MODULAR MOUNTING-PANEL SYSTEM		
8HG 716 734-001		END PIECE
8HG 716 735-001		MIDDLE PIECE



Two end pieces are required to make a mounting panel.  
By adding middle pieces, this panel can be extended as required.

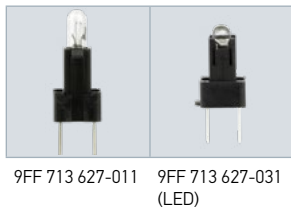


BLANKING PLUG FOR EMPTY SWITCH APERTURES	
9HB 713 629-001	



WARNING LIGHTS		
2AA 713 628-021		12 VOLT
2AA 713 628-031		24 VOLT
2AA 713 628-041	(LED)	12/24 VOLT

Bulbs to Suit	12V 24V	8GP 002 095-122 8GP 002 095-243
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














WARNING LIGHTS		
9FF 713 627-001		12 VOLT
9FF 713 627-011		24 VOLT
9FF 713 627-031	(LED)	12/24 VOLT

Bulbs to Suit	12V 24V	8GP 002 095-122 8GP 002 095-243
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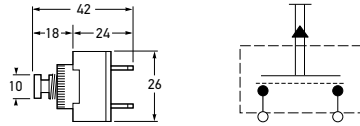


CONNECTORS		
8JA 713 631-001	(For switch)	8 POLE
8JA 715 600-001	(For bulb holder)	2 POLE
8KW 905 512-032	8573 (For connectors - Pack of 100)	BRASS TERMINALS

SYMBOL CARDS FOR SWITCHES 007 832...					
Part Number	Symbol	Symbol Card	Part Number	Symbol	Symbol Card
9XT 713 630-001	Green	Without symbol	9XT 714 300-201		Battery
9XT 713 630-011	Black	Without symbol	9XT 713 630-181		Window lift
9XT 713 630-021	Red	Without symbol	9XT 713 630-101		Windscreen
9XT 713 630-031	Yellow	Without symbol	9XT 713 630-121		Window wiper/wash
9XT 713 630-301		Light	9XT 713 630-131		Windscreen wash
9XT 714 300-131		Main beam	9XT 713 630-521		Defroster
9XT 713 630-421		Work lamp front	9XT 713 630-461		Air horn
9XT 713 630-701		Work lamp rear	9XT 713 630-201		Heater
9XT 714 300-141		Flasher lamp	9XT 713 630-221		Heater fan
9XT 713 630-391		Warning lamp	9XT 713 630-691		Slow
9XT 713 630-371		Work light	9XT 713 630-551		Front door
9XT 713 630-281		Rotating beacon	9XT 713 630-561		Rear door
9XT 713 630-711		Rotating beacon	<b>Fan</b>		
9XT 714 300-011		Parking brake	9XT 713 630-251		Fast
<b>Interior Lighting</b>					
9XT 713 630-271		High			

**Momentary Spring Return Switch - Off-(On)**

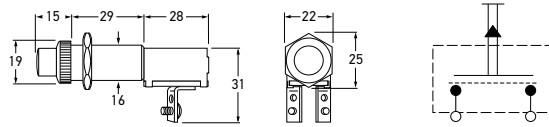
Off-momentary on push button (spring return).



<b>6JF 905 371-101</b>	<b>4507</b>		<b>OFF-(ON)</b>
Mounting	12mm diameter opening.		
For Panels	Up to 4mm thick.		
Maximum Load	6A @ 12V		

**Momentary Spring Return Push Button Starter Switch - Off-(On)**

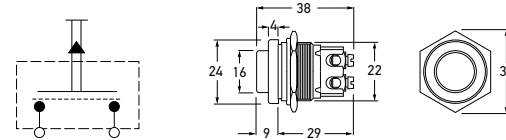
Brass construction. Chrome plated face nut and button. Off-momentary on push button (spring return).



<b>6JF 905 311-002</b>	<b>2763</b>		<b>OFF-(ON)</b>
Mounting	16mm diameter opening.		
For Panels	Up to 25mm thick.		
Maximum Load	20A @ 12V 10A @ 24V		

**Momentary Spring Return Push Button Switch - Off-(On)**

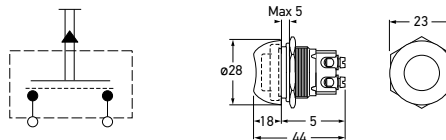
Off-momentary on push button (spring return) switch.



<b>6JF 001 571-004</b>	<b>4501</b>		<b>OFF-(ON)</b>
Mounting	22mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	16A @ 12V 8A @ 24V		

**Momentary Spring Return Push Button Switch - Off-(On)**

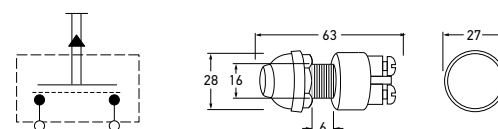
Water resistant push button type switch with rubber cap. Off-momentary on push button (spring return).



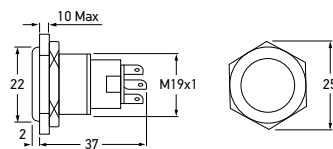
<b>6JF 001 571-152</b>	<b>4503</b>		<b>OFF-(ON)</b>
Mounting	23mm diameter opening.		
For Panels	Up to 2mm thick.		
Maximum Load	16A @ 12V 8A @ 24V		
Do not remove rubber cap/front face nut when fitting.			

**Momentary Spring Return Push Button Switch - Off-(On)**

Water resistant starter switch. Off-momentary on push button (spring return).



<b>6JB 905 371-002</b>	<b>4506</b>		<b>OFF-(ON)</b>
Mounting	16mm diameter opening.		
For Panels	Up to 10mm thick.		
Maximum Load	60A @ 12V 40A @ 24V		



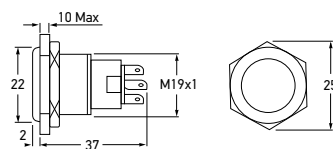
12 VOLT		24 VOLT		
8HG 958 455-001		8HG 958 455-101		RED
8HG 958 455-011		8HG 958 455-111		BLUE
Mounting	19mm diameter opening.			
Maximum Load	5A			
Protection	IP 67 (Protection against dust and temporary water immersion)			
For Panels	Up to 10mm thick.			
Accessories	8KB 990 258-021 Switch pigtail loom			



8KB 990 258-021

### Stainless Steel Latching Switch with LED Ring - Off-On

Exterior durable, 304 stainless steel switches featuring a ring of LED light. These through panel mount switches are ideal for switching lighting or installing into custom switch panels. The light rings may be wired to show power to a system or signal circuit activation.



12 VOLT		24 VOLT		
8HG 958 455-201		8HG 958 455-301		RED
8HG 958 455-211		8HG 958 455-311		BLUE
Mounting	19mm diameter opening.			
Maximum Load	5A			
Protection	IP 67 (Protection against dust and temporary water immersion)			
For Panels	Up to 10mm thick.			
Accessories	8KB 990 258-021 Switch pigtail loom			



8KB 990 258-021

### Stainless Steel Momentary Switch with LED Ring - Off-(On)

Exterior durable, 304 stainless steel switches featuring a ring of LED light. These through panel mount switches are ideal for switching lighting or installing into custom switch panels. The light rings may be wired to show power to a system or signal circuit activation.



12 VOLT		24 VOLT		
8HG 958 456-001		8HG 958 456-101		RED
Mounting	19mm diameter opening.			
Sound Level	>80dB (1m)			
Protection	IP 50 (Protection against dust)			
For Panels	Up to 10mm thick.			

### Stainless Steel Buzzer with LED Ring

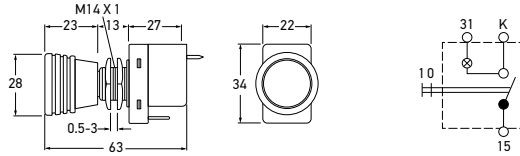
Exterior durable, 304 stainless steel warning buzzer to match stainless steel switches (above). Also feature a ring of LED light.





**Illuminated Switch - Off-On**

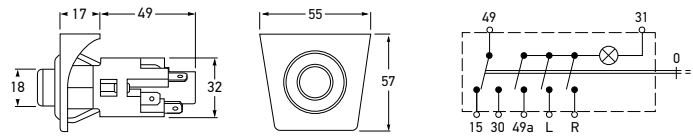
Knob incorporates red or green pilot lamp.



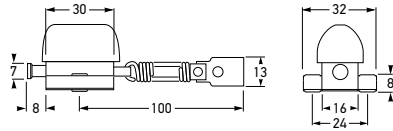
<b>6ED 004 778-014</b>	<b>4412</b>		<b>RED</b>
Mounting	14mm diameter opening.		
For Panels	Up to 6mm thick.		
Maximum Load	10A @ 12V 5A @ 24V		
Bulb to Suit	12V	8GP 002 095-122	
	24V	8GP 002 095-243	

**Hazard Warning Switch**

For cars, trucks, buses with and without trailers. Black plastic mounting panel. Red knob with pilot lamp. Includes 8 pole multiple adaptor. Push-on 6mm terminals supplied. Wiring diagram and instructions are included.



<b>6HF 001 579-081</b>	<b>5227</b>		<b>OFF-ON</b>
Mounting	29mm diameter opening.		
Maximum Load	7A @12V		
For Panels	Up to 3mm thick.		
Bulbs to Suit	12V	8GP 002 066-123	
	24V	8GP 002 066-243	

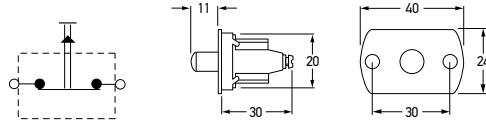


<b>6DD 905 374-002</b>	<b>4560</b>		<b>OFF-ON</b>
Maximum Load	10A @ 12V 5A @ 24V		



**Stop Lamp Switch - Off-On**

Normally open, contacts are closed when tension is applied to the spring. Complete with splash proof rubber cap. Brake linkage clamp 6mm diameter.

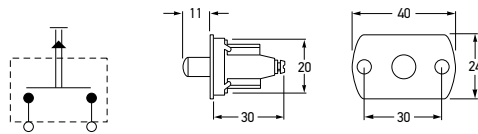


<b>6ZF 003 549-004</b>	<b>4550</b>		<b>ON-OFF</b>
Mounting	21mm diameter opening.		
Maximum Load	2A @ 12V 1A @ 24V		



**Door Contact Switch - On-Off**

Switch closes circuit if door is opened.

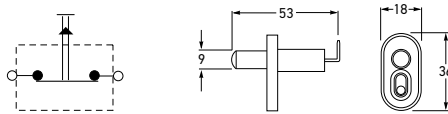


<b>6ZF 003 549-023</b>	<b>4551</b>		<b>OFF-ON</b>
Mounting	21mm diameter opening.		
Maximum Load	2A @ 12V 1A @ 24V		



**Door Contact Switch - Off-On**

Switch opens circuit if door is opened. May be used as safety cut-off switch.

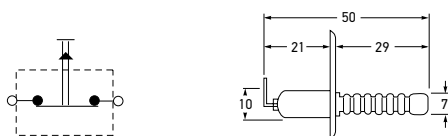


<b>6ZF 905 373-002</b>	<b>4553</b>		<b>ON-OFF</b>
Mounting	12mm diameter opening and screw.		
Maximum Load	3.5A @ 12V		
Plunger automatically adjusts to door gap on initial operation.			



**Door Contact Switch - On-Off**

Switch closes circuit if door is opened. Corrosion proof black plastic. Rubber seal. Push-on terminal.



<b>6ZF 905 373-011</b>	<b>4554</b>		<b>ON-OFF</b>
Mounting	10mm diameter opening and screw.		
Maximum Load	5A @ 12V		

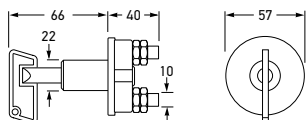


**Door Contact Switch - On-Off**

Extended arm which may be cut to length to suit opening.

**Battery Master Switch**

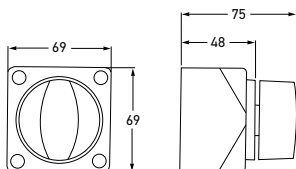
Suitable for cars and medium sized trucks. Complete with removable key. For interrupting circuits (prevents theft and short circuit).



<b>6EK 002 843-052</b>	<b>4650</b>		<b>OFF-ON</b>
Mounting	22mm diameter opening		
Maximum Load	12V 24V	1000A for up to 10 seconds. 500A for up to 10 seconds.	
Maximum Continuous Load	12/24V - 50A at a maximum ambient temperature of 80°C with 35mm <sup>2</sup> lead, connected with ring-type terminals.		
Termination	2 x M10 studs.		
Spare Part	9SL 706 729-013 Spare key		
Switch not designed for Marine applications.			

**Battery Master Switch**

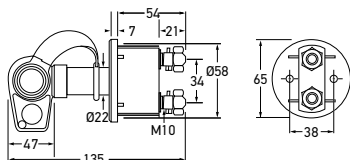
Suitable for cars and medium sized trucks. Complete with removable key.



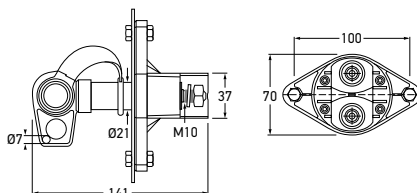
<b>6EK 998 540-002</b>	<b>4640</b>		<b>OFF-ON</b>
Mounting	Recess or surface mount.		
Maximum Load	12/24V	1250A for up to 10 seconds	
Maximum Continuous Load	12/24V	275A	
Termination	2 x M10 studs.		
Spare Part	9SL 980 832-001 Spare key		

**Battery Master Switch**

Suitable for cars and medium sized trucks, with a continuous rating of 250 amps. Provides effective protection against theft and fire in case of accidents. With sealing cap when not in use which doubles as a key holder.



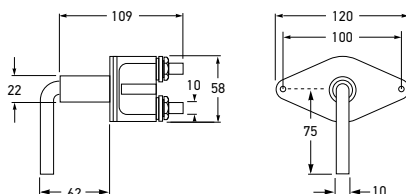
<b>6EK 002 843-141</b>	<b>4649</b>		<b>OFF-ON</b>
Mounting	22mm diameter opening.		
Maximum Load	24V	2000A for 5 seconds	
Maximum Continuous Load	12/24V	250A	
Termination	2 x M10 studs.		
Protection	IP 65 (Protection against dust and water jets)		



<b>6EK 002 843-121</b>	<b>4648</b>		<b>OFF-ON</b>
Mounting	21mm diameter opening.		
Maximum Load	24V	2500A for 10 seconds	
Maximum Continuous Load	12/24V	500A	
Termination	2 x M10 studs.		
Protection	IP 65 (Protection against dust and water jets)		

### High Capacity Battery Master Switch

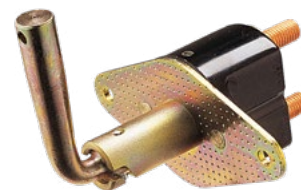
Suitable for trucks and other commercial machinery, with a high continuous rating of 500 amps. Provides effective protection against theft and fire in case of accidents. With sealing cap when not in use which doubles as a key holder.



<b>6EK 001 559-001</b>	<b>4653</b>		<b>OFF-ON</b>
Mounting	22mm diameter opening.		
Maximum Load	12V 24V	5000A for 10 seconds 2500A for 10 seconds	
Maximum Continuous Load	12/24V	100A continuous at a maximum ambient temperature of 60°C with 50mm² lead connected with ring-type terminals.	
Termination	2 x M10 studs.		
Protection	IP X4 (Protection against water splashing)		
Spare Part	9SL 042 991-003	Spare key	
Switch not designed for Marine applications.			

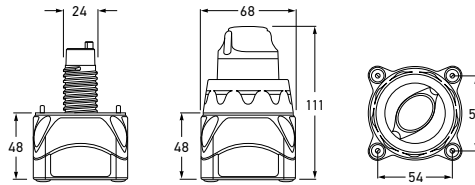
### Heavy Duty Battery Master Switch

For trucks, buses and earth moving equipment. Complete with removable key.



**Battery Master Switch  
- Threaded Collar**

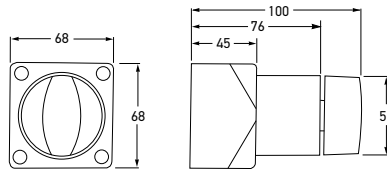
Battery master switch with threaded collar. Suitable for cars and medium sized trucks. Complete with removable key, labelled handle and removable back cover. For interrupting circuits (prevents theft and short circuit).



<b>1GJ 980 833-001</b>	<b>4722</b>		<b>OFF-ON</b>
Mounting	Recess or surface mount. 24mm diameter opening.		
Maximum Load	12/24V	1250A for up to 10 seconds.	
Maximum Continuous Load	12/24V	275A	
Termination	2 x 10mm studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		

**Remote Operated Battery Master Switch**

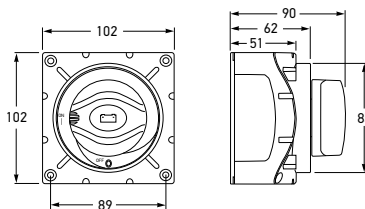
Battery switch with tin-plated copper studs and nuts. Can be operated manually or remotely with a separate switch (not supplied). Suitable for mounting alongside battery reducing cable lengths to starter motor. Complete with removable key and 3 way DTM plug.



<b>6EN 980 835-001</b>	<b>4724</b>		<b>OFF-ON</b>
Mounting	Recess or surface mount. 53mm diameter opening.		
Voltage	12/24V		
Power Consumption	2W @ 12V when operating, 0.25W static.		
Maximum Load	12/24V	1250A for up to 10 seconds.	
Maximum Continuous Load	12/24V	275A	
Termination	2 x 10mm studs.		
Cable Length	500mm		

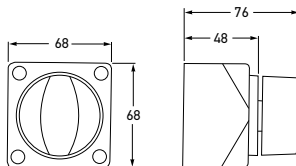
**Heavy Duty Battery Master Switch**

For commercial use. Features sliding contact for self cleaning.



<b>6EK 998 540-062</b>	<b>4720</b>		<b>OFF-ON</b>
Mounting	Recess or surface mount. 85mm diameter opening.		
Maximum Load	12/24V	2500A for up to 10 seconds.	
Maximum Continuous Load	12/24V	600A	
Termination	2 x 12mm studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		

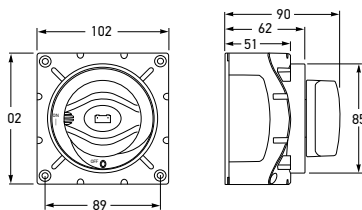
ACCESSORIES



<b>2SL 980 834-001</b>	<b>4723</b>		<b>OFF-B1-BOTH-B2</b>
Mounting	Recess or surface mount.		
Maximum Load	12/24V	1000A for up to 10 seconds.	
Maximum Continuous Load	12/24V	200A	
Termination	3 x 5/16" studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		

Battery Selector Switch

Battery switch to select either from two power sources or combine together. Will also isolate from the power sources.



<b>6EB 998 540-202</b>	<b>4721</b>		<b>OFF-B1-BOTH-B2</b>
Mounting	Recess or surface mount. 85mm diameter opening.		
Maximum Load	12/24V	1500A for up to 10 seconds	
Maximum Continuous Load	12/24V	350A	
Termination	3 x 10mm studs.		
Protection	IP 56 (Protection against solid foreign objects up to 1mm and powerful water jets)		

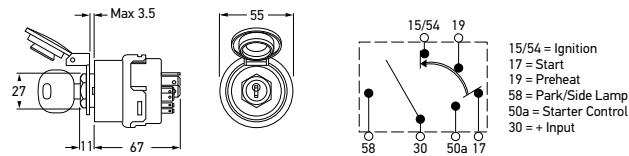
Battery Selector Switch

Battery switch to select either from two power sources or combine together. Will also isolate from the power sources.



### Diesel Pre-heating Starter Switch

Pre-heating starter switch supplied with two keys. Key removes in park and off.

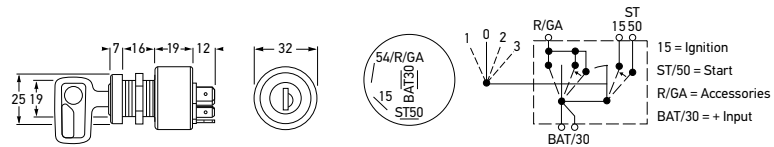


<b>6JB 003 959-001</b>	<b>4005</b>	
Mounting	27mm diameter opening.	
For Panels	Up to 3.5mm thick.	
Function	5 position switch (park, off, driving, pre-heat, start).	

TERMINAL	POSITION	FUNCTION	CURRENT @ 24V
30-58	P	Park Lamps	4A
30-15/54	1	Driving	18A
30-19	2	Preheat	35A
30-50a/17	3	Start	5A/35A

### Ignition and Starter Switch

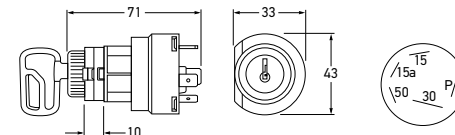
Switch with spring loaded return. Supplied with two keys.



<b>6JB 950 505-002</b>	<b>4008</b>	
Mounting	19mm diameter opening.	
For Panels	Up to 19mm thick.	
Maximum Load	@12V ignition 25A, start 12A, accessory 15A.	
Spare Part	Blank key number Silca BH4.	
Function	Four position switch (accessory, off, ignition, start).	

### Heavy Duty Ignition and Starter Switch

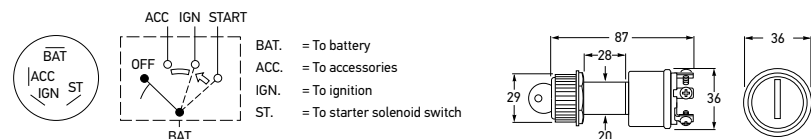
Heavy duty ignition and starter switch, featuring plastic outer construction for maximum protection against damage. Supplied with two keys.



<b>6JK 905 339-002</b>	<b>4008HD</b>	
Mounting	19mm diameter opening.	
For Panels	Up to 10mm thick.	
Maximum Load	@12V park 20A, ignition 20A, start 25A.	
Function	Four position switch (park, off, ignition, start). Key removes in park and off.	

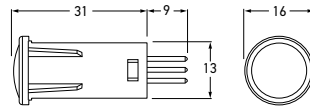
### Ignition and Starter Switch

Four position switch with spring loaded return. Four screw terminals.



<b>6JB 905 313-002</b>	<b>2766</b>	
Mounting	21mm diameter opening.	
For Panels	Up to 25mm thick.	
Maximum Load	@12V ignition 5A, start 5A, accessory 10A.	
Function	Four position switch (accessory, off, ignition and start)	

ACCESSORIES



2AA 905 300-002	2708		RED
2AA 905 300-012	2709		GREEN
2AA 905 300-022	2710		BLUE
2AA 905 300-032	2711		AMBER

Mounting 12.5mm diameter opening.

Voltage	12V
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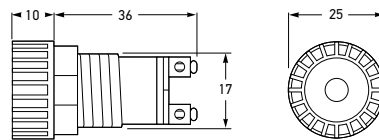
Suitable for 12V only. Bulb not replaceable.

Pilot Lamp - 12 Volt

Panel push fit pilot lamp with non-replaceable bulb. See below for function descriptions.



2AA 905 300-012 2AA 905 300-022 2AA 905 300-032



2AA 905 301-002	2712		RED
2AA 905 301-012	2713		GREEN
2AA 905 301-022	2714		BLUE
2AA 905 301-032	2715		AMBER

Mounting 17mm diameter opening.

Bulbs to Suit	12V	8GP 002 068-123
	24V	8GP 002 068-244

Pilot Lamp

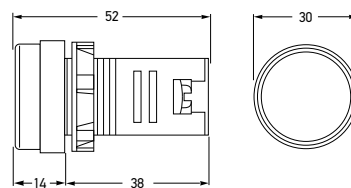
Pilot lamp utilizing bayonet based bulb for use under heavy duty conditions. See below for function descriptions.



2AA 905 301-012 2AA 905 301-022 2AA 905 301-032

FUNCTION DESCRIPTIONS

RED	Ignition, handbrake and hazard warning lamps
GREEN	Indicator lamps
BLUE	Main beam and auxiliary headlamps
AMBER	Fog lamps



LED Pilot Lamp

Heavy duty multi-chip LED pilot lamp featuring shock-resistant one-piece construction for long service life and polycarbonate lens. See left for function descriptions.



2AA 910 233-032 2AA 910 233-012

2AA 910 233-042	2716		RED
2AA 910 233-102	271624V		RED
2AA 910 233-032	2717		GREEN
2AA 910 233-092	271724V		
2AA 910 233-012	2718		AMBER
2AA 910 233-062	271824V		
2AA 910 233-022	2720		BLUE
2AA 910 233-072	272024V		

Mounting 22mm diameter opening.

For Panels	Up to 38mm thick.
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Voltage	12V or 24V AC/DC
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Protection	IP 65 (Protection against dust and water jets) when installed.
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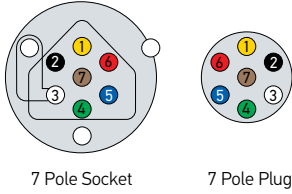


2AA 910 233-022

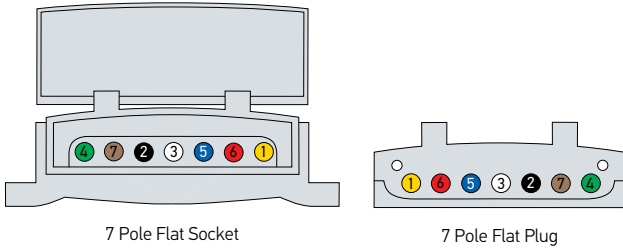


## Trailer Connector Wiring Specifications

### Cable Entry View



### Front View



7 POLE CONNECTOR WIRING SPECIFICATIONS	
Terminal Number	Connect to
1	Left-hand flasher lamps
2	Reversing lamps (optional)
3	Earth return
4	Right-hand flasher lamps
5	Service brakes (or Auxiliary, optional)
6	Stop lamps
7	Rear position, number plate and clearance lamps

Where service brakes are not fitted, terminal no.5 may be used for auxiliaries.

## 7 Pole Flat Socket

Impact resistant, UV stabilised plastic spring loaded lid. Nickel plated contacts for excellent electrical performance.



<b>8JB 910 032-011</b>	4920	
<b>8JB 910 032-017</b>	4920BULK	PACK OF 50
Maximum Load	20A @ 12V (total) 10A @ 24V (total)	

## 7 Pole Flat Plug

Impact resistant, UV stabilised plastic. Nickel plated contacts for excellent electrical performance.




<b>8JA 910 032-001</b>	4921	
<b>8JA 910 032-007</b>	4921BULK	PACK OF 50
Maximum Load	20A @ 12V (total) 10A @ 24V (total)	

## 7 Pole Round 12V Spiral Cable



<b>8KA 004 797-021</b>	
Material	Polyurethane with alloy plugs
Cable	6 x 1.0mm <sup>2</sup> + 1 x 1.5mm <sup>2</sup>
Cable Length	Up to 4.0m
Compliance	ISO 1724 / ISO 6722


<b>8JB 001 943-004</b>	<b>4901</b>	
Maximum Load	16A @ 12V with 1.5mm <sup>2</sup> cable (total).	25A @ 12V with 2.5mm <sup>2</sup> cable (total).
Accessory	9GD 735 641-002 Gasket with cable exit	

**7 Pole Plastic Socket**

Black plastic socket with removable contact set. 8JB 001 943-081 with disconnecting contact for rear fog or rear parking sensors.




9GD 735 641-002

<b>8JA 001 930-004</b>	<b>4902</b>	
Maximum Load	16A @ 12V with 1.5mm <sup>2</sup> cable (total).	25A @ 12V with 2.5mm <sup>2</sup> cable (total).

**7 Pole Plastic Plug**

Black plastic plug with strain relief.




<b>8JB 001 939-004</b>	<b>4909</b>	
Maximum Load	16A @ 12V with 1.5mm <sup>2</sup> cable (total).	25A @ 12V with 2.5mm <sup>2</sup> cable (total).

**7 Pole Plastic Socket**

Simply stores in boot until required. Requires no permanent bumper mounting.




<b>8JA 001 918-005</b>	<b>4911</b>	
<b>8JA 001 918-007</b>	<b>4911BULK</b>	<b>PACK OF 25</b>
Maximum Load	16A @ 12V with 1.5mm <sup>2</sup> cable (total).	25A @ 12V with 2.5mm <sup>2</sup> cable (total).

**7 Pole Metal Plug**

Solid metal plug with cable strain relief.



<b>8JB 001 941-006</b>	<b>4912</b>	
<b>8JB 001 941-007</b>	<b>4912BULK</b>	<b>PACK OF 25</b>
Maximum Load	16A @ 12V with 1.5mm <sup>2</sup> cable (total).	25A @ 12V with 2.5mm <sup>2</sup> cable (total).

**7 Pole Metal Socket**

Solid metal socket with removable contact set.



Closed view

7 Pole Heavy Duty Metal Socket with Screw Terminals - N Type



<b>8JB 003 833-003</b>	<b>4907</b>	<b>SOCKET</b>
Maximum Load	15A @ 24V with 1.5mm <sup>2</sup> cable (total) 20A @ 24V with 2.5mm <sup>2</sup> cable (total)	
Cable	Suitable for cable 9.5 - 12.5mm in diameter.	
Compliance	ISO 1185	

7 Pole Heavy Duty Metal Plug with Screw Terminals - N Type



<b>8JA 003 831-003</b>	<b>4908</b>	<b>PLUG</b>
Maximum Load	15A @ 24V with 1.5mm <sup>2</sup> cable (total) 20A @ 24V with 2.5mm <sup>2</sup> cable (total)	
Cable	Suitable for cable 9.5 - 12.5mm in diameter.	
Compliance	ISO 1185	

13 Pole (7 + 6) WeST Plug



<b>8JA 005 951-061</b>		<b>PLUG</b>
Maximum Load	15A @ 12V with 1.5mm <sup>2</sup> cable (Total)	
Cable	Suitable for 11.5 - 14.0 mm in diameter.	
Compliance	ISO 11446	

13 Pole (7 + 6) WeST Socket



<b>8JB 005 949-031</b>		<b>SOCKET</b>
Maximum Load	15A @ 12V with 1.5mm <sup>2</sup> cable (Total)	
Compliance	ISO 11446	
Note: Can be used with standard 7 pole plugs.		

5/7 Pole ABS Socket

Made of black fibreglass reinforced nylon.

8JB 007 645-021		CRIMP
8JB 007 645-031		SCREW
Mounting	54mm diameter opening.	
Maximum Load	25A @ 24V (total)	
Cable	Suitable for cable 9 - 16mm in diameter.	
Spare Parts	9MK 726 762-831 Crimp contact set – 5 x 1.5mm <sup>2</sup> , 2 x 4.0mm <sup>2</sup> , 2 x 6.0mm <sup>2</sup> , 2 x Blanks.	



5/7 Pole ABS Plug

Made of black fibreglass reinforced nylon.

8JA 007 644-041		CRIMP
8JA 007 644-051		SCREW
Maximum Load	25A @ 24V (total)	
Spare Parts	9MK 726 759-831 Crimp contact set – 5 x 1.5mm <sup>2</sup> , 2 x 4.0mm <sup>2</sup> , 2 x 6.0mm <sup>2</sup> , 2 x Blanks.	
Cable	Suitable for cable 11 - 13mm in diameter.	



Plug-in Socket Tester - 24V

Designed for testing ABS sockets.

8PD 004 508-031	
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7 Pole EBS Spiral Cable - 24 Volt

Spirally coiled cable with 2 plugs and guard grommets. Extremely resistant to high and low temperatures as well as weathering. High resistance to oils and chemicals. Made to withstand repeated bending.

8KA 007 648-021		7 PIN
Cable	7 Pin	5 x 1.5mm <sup>2</sup> + 2 x 4.0mm <sup>2</sup>
Cable Length	Up to 4.0m	



## 13 Pole Socket

**8JB 005 949-001****SOCKET**

Maximum Load 16A @ 24V with 1.5mm<sup>2</sup> cable (total)  
25A @ 24V with 2.5mm<sup>2</sup> cable (total)

Compliance ISO 11446

## 13 Pole Plug

**8JA 005 951-001****PLUG**

Maximum Load 16A @ 24V with 1.5mm<sup>2</sup> cable (total)  
25A @ 24V with 2.5mm<sup>2</sup> cable (total)

Compliance ISO 11446

## 13 Pole to 7 Pole Adaptors

Adaptors for connecting a 13 pole vehicle socket with a 7 pole trailer plug.

**8JA 005 952-001**

Maximum Load 16A @ 12V (total)

To suit late model vehicles with 13 pole plugs to standard round 7 pole, 250mm long.

**8JA 005 952-121**

Maximum Load 16A @ 12V (total)

To suit late model vehicles with 13 pole plugs to standard flat 7 pole, 250mm long.

ACCESSORIES

8JA 007 241-021		SCREW
8JA 007 241-031		CRIMP
Maximum Load	16A @ 24V with 1.5mm <sup>2</sup> cable (total) 25A @ 24V with 2.5mm <sup>2</sup> cable (total)	
Cable	Suitable for cable diameter measuring 12 - 18mm.	

15 Pole Plastic Plug

Plastic plug with rubber gasket and nickel-plated pins. Featuring fibre glass reinforced polyamide housing and mechanical strain relief. Secure arrest with rust resistant metal bail (ISO 12 098).



15 Pole Plastic Socket

Plastic socket with lid, rubber gasket and nickel-plated pins. Featuring fibre glass reinforced polyamide housing. PC gland for cable exit.



8JB 007 242-011		SCREW
8JB 007 242-021		CRIMP
Maximum Load	16A @ 24V with 1.5mm <sup>2</sup> cable (total) 25A @ 24V with 2.5mm <sup>2</sup> cable (total)	
Cable	Suitable for cable diameter measuring 12 - 18mm.	

15 Pole Spiral Cable - 24 Volt

Spirally coiled cable with 2 plugs and guard grommets. Extremely resistant to high and low temperatures as well as weathering. Maximum resistance to oils and chemicals. Made to withstand repeated bending.



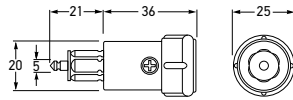
8KA 007 648-041	
Cable	12 x 1.5mm <sup>2</sup> plus 3 x 2.5mm <sup>2</sup> leads.
Cable Size	4m (stretched).

Parking Socket for EBS Plugs

8HG 007 647-001	
Mounting	54mm diameter opening

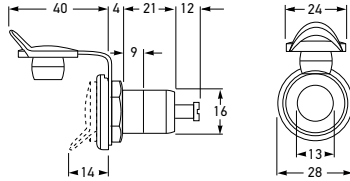


2 Pole Plug



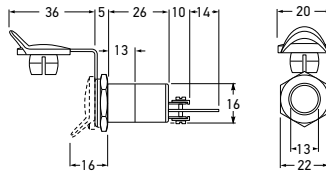
<b>8JA 002 262-004</b>	<b>4914</b>		<b>PLUG</b>
Maximum Load	16A @ 12V 8A @ 24V		
Sockets to Suit	8JB 001 946-025 8JB 004 777-012 8JB 004 123-006 8JB 905 388-002		

2 Pole Socket with Cover



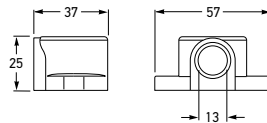
<b>8JB 001 946-025</b>	<b>4915</b>		<b>SOCKET</b>
Mounting	19mm diameter opening.		
Maximum Load	16A @ 12V 8A @ 24V		

2 Pole Socket with Cover - Insulated Earth



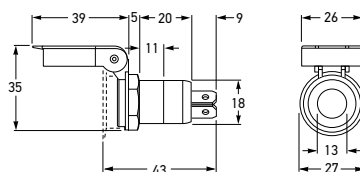
<b>8JB 004 777-012</b>	<b>4916</b>		<b>SOCKET</b>
Mounting	19mm diameter opening.		
Maximum Load	16A @ 12V 8A @ 24V		

2 Pole Surface Mount Socket



<b>8JB 004 123-006</b>	<b>4917</b>		<b>SOCKET</b>
Mounting	Surface mount.		
Maximum Load	16A @ 12V 8A @ 24V		

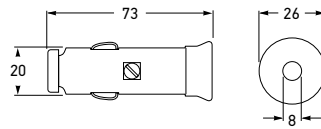
2 Pole Socket with Metal Earth Tab and Cover



<b>8JB 905 388-002</b>	<b>4918</b>		<b>SOCKET</b>
Mounting	22mm diameter opening.		
Maximum Load	16A @ 12V 8A @ 24V		

2 Pole Power Plug

Suitable for standard cigarette sockets.

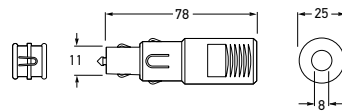


<b>8JA 905 395-002</b>	<b>4950</b>		<b>PLUG</b>
Maximum Load	8A @ 12V 4A @ 24V		
Socket to Suit	8JB 008 023-051		



2 Pole Fused Power/DIN Plug

Combination lighter/DIN 2 pole plug with in-built 8A ceramic type fuse suitable for both cigarette lighter and DIN ISO 4165 sockets (standard 2 pole sockets).

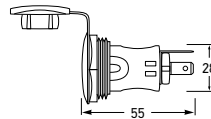


<b>8JA 007 589-004</b>	<b>4952</b>		<b>PLUG</b>
Maximum Load	8A @ 12V		
Sockets to Suit	8JB 001 946-025   8JB 004 777-012   8JB 004 123-006   8JB 905 388-002 8JB 008 023-051		



2 Pole Power Socket

2 pole lighter size power socket with protective cover for connection of a variety of electrical accessories.



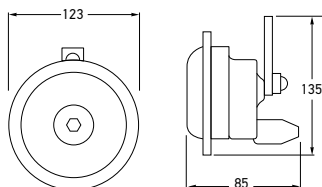
<b>8JB 008 023-051</b>	<b>4943R</b>		<b>SOCKET</b>
Maximum Load	15A @ 12V		



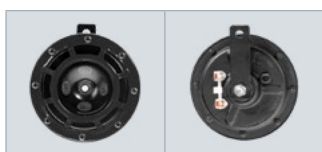


**Super Tone Horn - Set of 2**

Traffic blaster, generates a penetrating strong tone. Robust housing in a first-class design with striking grille. 3AG 003 399-081 also suitable for off-road use.



3AG 003 399-801



3AG 003 399-081 Rear view

<b>3AG 003 399-801</b>	<b>6036 (2 Horns)</b>		<b>12 VOLT</b>
<b>3AG 003 399-081</b>	<b>6037 (2 Horns)</b>		
<b>3AG 003 399-101</b>	<b>603724V (2 Horns)</b>		<b>24 VOLT</b>
Power Consumption	3AG 003 399-801 66W x 2 3AG 003 399-081 78W x 2 3AG 003 399-101 84W x 2		
Frequency	3AG 003 399-801 300/500Hz 3AG 003 399-081 3AG 003 399-101 375/500Hz		
Sound Level	118dB		



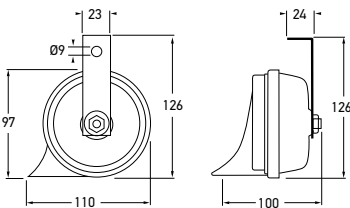
3AG 003 399-801 Packaging 3AG 003 399-081/...101 Packaging

**Twin Tone Scroll Horn - Set of 2**

Includes 12 volt relay.



Packaging



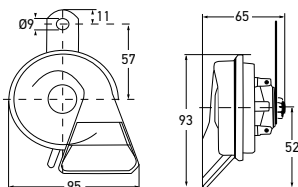
<b>3FH 007 424-801</b>	<b>6004 (2 Horns)</b>		<b>12 VOLT</b>
Power Consumption	72W x 2		
Voltage	12V		
Frequency	High Tone 500Hz Low Tone 400Hz		
Sound Level	Combined 110dB @ 2.0m		

**Twin Tone Scroll Horn - Set of 2**

Galvanised metal housing and plastic trumpet. Safe from corrosion.



Packaging



<b>3FH 007 728-831</b>	<b>6005 (2 Horns)</b>		<b>12 VOLT</b>
Power Consumption	72W x 2		
Voltage	12V		
Frequency	High Tone 500Hz Low Tone 400Hz		
Sound Level	Combined 110dB @ 2.0m		

### Low and High Tone Disc Horns

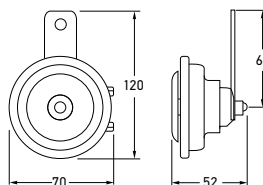
Single bolt mount. 92mm diameter.

LOW TONE		HIGH TONE		
3AL 002 952-013	6001	3AL 980 315-001	6003	12 VOLT
3BA 002 768-383	6002	3AL 980 315-021	6020	24 VOLT
Power Consumption	72W			
Frequency	Low tone	335Hz		
	High tone	435Hz		
Sound Level	110dB @ 2.0m			



3AL 002 952-013

3AL 980 315-001



### S70 Compact Horn

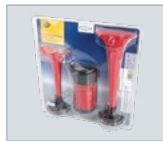
Single bolt mount.

3AL 922 196-011	6029	12 VOLT
Power Consumption	30W	
Voltage	12V	
Protection	IP X4K (Protection against high pressure water splash)	
Frequency	420Hz	
Sound Level	112dB @ 2m	
Connector	Male blade terminals	
Compliance	ECE R28	

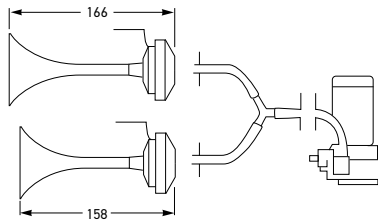


**Dual Trumpet Air Horn Kit**

Installation accessories included.



Blister packaging



<b>3PB 003 001-651</b>	<b>6014</b>		<b>12 VOLT</b>
<b>3PB 003 001-661</b>	<b>6027</b>		<b>24 VOLT</b>
Mounting	Installation accessories included.		
Current Draw	20A @ 12V 10A @ 24V		
Frequency	840/795Hz		
Sound Level	117dB		
Operating Pressure	110Kpa (16psi)		

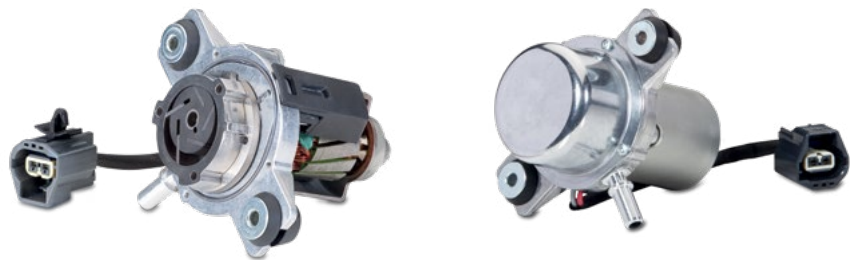
**Vacuum Pump UP28**

The UP28 vacuum pump can be triggered on demand to support the brake booster. If the combustion engine does not supply sufficient vacuum under certain operating conditions, i.e. cold start/warming up phase, the UP28 supplies the vacuum to ensure brake booster operation.

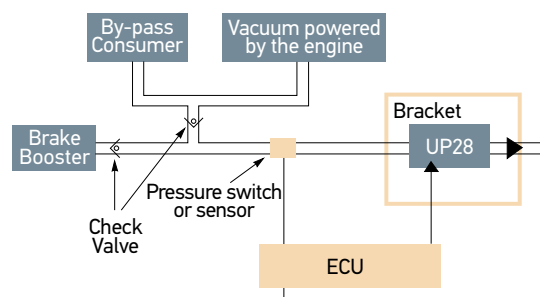
The UP28 is installed parallel to the main combustion engine. The UP28 sucks in filtered air via the brake booster and flexible pipes. To enable accurate pressure measurement by the control unit, non-return pressure valves are installed (see diagram). The electric contact between the UP28 and the control unit is established via a cable equipped with an engine compartment plug attached to the vacuum pump.

The braking system is one of the most important systems in any vehicle. To ensure that a constant and effective brake power is accessible at all times, the use of a vacuum pump is often necessary. Most vehicle brake boosters use a vacuum that is generated by the naturally aspirated engine. Current engine development projects mainly aim to increase the efficiency of drive concepts and further conserve resources. Substantially lower fuel consumption can be achieved by e.g. running the engine as unthrottled as possible, which under certain operating conditions, may result in an insufficient vacuum supply from the combustion engine for brake boost.

<b>8TG 009 428-087</b>	
Operating Temperature Range	- 40 °C ... + 100 °C (< 20 min. up to + 120 °C)
Voltage	10.5 - 16V DC
Maximum Vacuum Level	≥ 86% (Below ambient pressure level)
Pressure build-up time at 100 hPa ambient pressure, 12V	$p_{abs} = 500 \text{ mbar in } t \leq 6 \text{ sec}$ $p_{abs} = 300 \text{ mbar in } t \leq 12 \text{ sec}$
Test volume	Approx. 3.2 l
Pump Operating Time	> 600 hours
Switching Operations	> 450,000



**OPERATION DIAGRAM**



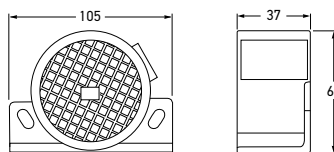
ACCESSORIES



<b>3SL 980 316-031</b>	<b>6050SA</b>	<b>77-97dB</b>
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	Less than 1A.	
Frequency	White noise/broadband.	
Sound Level	77-97 ± 4dB @ 1.2m	
Temperature	Operating range -40 to 85°C.	
Protection	IP 68 (Protection against dust and water immersion)	
Compliance	SAE J994	CE

**Broadband Reversing Alarm**

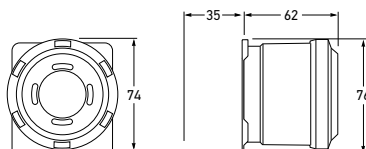
Reversing alarm with multi-frequency broadband sound.



<b>3SL 980 316-021</b>	<b>6052</b>	<b>97dB</b>
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	Max. 0.5A	
Frequency	White noise/broadband.	
Sound Level	97 ± 4dB @ 1.2m	
Other specifications	as 3SL 980 316-031	

**Broadband Reversing Alarm**

Reversing alarm with multi-frequency broadband sound.



<b>3SL 980 316-001</b>	<b>6042</b>	<b>87dB</b>
<b>3SL 905 415-001</b>	<b>6043</b>	<b>97dB</b>
<b>3SL 905 415-011</b>	<b>6044</b>	<b>112dB</b>
Mounting	Universal mounting comes complete with heavy-gauge plated steel mounting bracket. Can be installed on positive and negative ground vehicles.	
Voltage	12-48V	
Current Draw	Less than 0.20A	
Frequency	80 signals per minute +/- 20%	
Sound Level	3SL 980 316-001	87dB @ 1.2m
	3SL 905 415-001	97dB @ 1.2m
	3SL 905 415-011	112dB @ 1.2m
Temperature	Operating range -40°C to 74°C	
Protection	Protection against dust and high pressure washing	
Compliance	SAE J994	

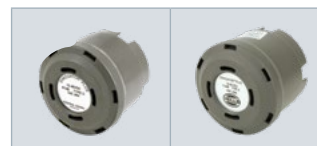
**Evacuator Plus Heavy Duty Reversing Alarm**

The Evacuator Plus heavy duty reversing and warning alarm features a lightweight piezoelectric output circuit.

The housing is constructed of high impact ABS plastic resin and is environmentally sealed against moisture, dust and corrosion. Evacuator Plus reversing and warning alarms are steam cleanable.



3SL 980 316-001



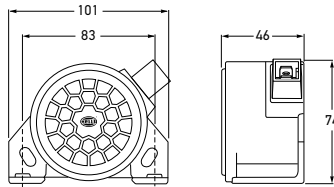
3SL 905 415-001    3SL 905 415-011

### Heavy Duty Reversing Alarm

Heavy duty reversing alarm with integral AMP connection and fixed sound pressure levels of 97/107dB @ 1.2 metres. Epoxy encapsulated circuit boards offer protection against humidity, dirt and vibration.



8KA 990 258-011



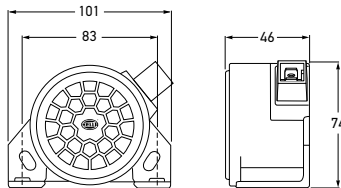
<b>3SL 009 148-011</b>	<b>6009</b>	<b>97dB</b>
<b>3SL 009 148-021</b>	<b>6010</b>	<b>107dB</b>
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	3SL 009 148-011	0.2A
	3SL 009 148-021	0.3A
Frequency	60 signals per minute (± 20%).	
Sound Level	3SL 009 148-011	97 ± 4dB @ 1.2m
	3SL 009 148-021	107 ± 4dB @ 1.2m
Temperature	Operating range -40°C to 85°C.	
Protection	IP 66 (Protection against dust and high pressure washing)	
Spare Part	8KA 990 258-011	Plug and lead
Compliance	SAE J994	

### Heavy Duty Reversing Alarm

Heavy duty reversing alarm with integral AMP connection. Automatically adjusts sound pressure level to changing noise environments. Solid state electronics, self-adjusting to the minimum of 5dB above surrounding noise levels effectively reducing irritation. Epoxy encapsulated circuit boards offer protection against humidity, dirt and vibration.

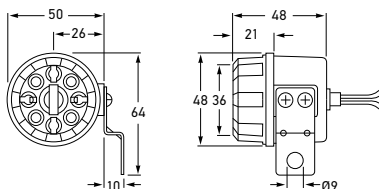


8KA 990 258-011



<b>3SL 009 148-101</b>	<b>6013</b>	<b>82-102dB</b>
Mounting	Integrated universal mounting bracket for upright, pendant or surface mounting.	
Voltage	12-24V	
Current Draw	0.4A	
Frequency	60 signals per minute (± 20%).	
Sound Level	82 - 102 ± 4dB @ 1.2m	
Temperature	Operating range -40°C to 85°C.	
Protection	IP 66 (Protection against dust and high pressure washing)	
Spare Part	8KA 990 258-011	Plug and lead
Compliance	SAE J994	

ACCESSORIES



<b>3SL 950 751-012</b>	<b>6023</b>		<b>12-36 VOLT</b>
Current Draw	Less than 50mA.		
Sound Level	89 +/- 2dB (at 1.2m)		

**Multivolt™ Reversing Alarm**

Durable intermittent reversing alarm. Easily fitted to any car or truck's reversing lamp wiring system or wire to a switch on your dashboard.



<b>3SL 905 415-031</b>	<b>6048</b>	<b>87-112dB AUTO</b>
Mounting	Universal mounting brackets.	
Voltage	12-24V	
Current draw	Less than 0.50A	
Frequency	80 signals per minute.	
Sound level	87 to 112dB @ 1.2m	
Temperature	-40°C to 77°C	
Protection	IP 55 (Protection against dust and water jets)	
Compliance	SAE J994	

**Reversing Alarm**

Durable intermittent reversing alarm. Easily fitted to any car or truck's reversing lamp wiring system or wire to a switch on your dashboard.



<b>3SL 905 415-041</b>	<b>6049</b>	<b>107/112dB MANUAL</b>
Mounting	Universal mounting brackets.	
Voltage	12-24V	
Current draw	Less than 0.8A	
Frequency	80 signals per minute.	
Sound level	107 or 112dB @ 1.2m	
Temperature	-40°C to 77°C	
Protection	IP 55 (Protection against dust and water jets)	
Compliance	SAE J994	

**Reversing Alarm**

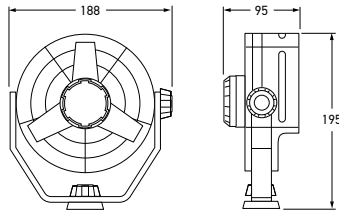
Durable intermittent reversing alarm. Easily fitted to any car or truck's reversing lamp wiring system or wire to a switch on your dashboard.



Reactor alarms comply with SAE J994 requirements and OSHA regulations.

**Turbo Fan**

Turbo fans provide high capacity at low power consumption. Features include impact resistant housing, low-noise operation and soft plastic impellers, shielded by sturdy protective grille for added safety. Fans can be turned in all directions, and locked in position. Airflow can be regulated by two-stage switch.



<b>8EV 003 361-002</b>		<b>12 VOLT</b>
<b>8EV 003 361-022</b>	<b>White</b>	
<b>8EV 003 361-012</b>		<b>24 VOLT</b>
Power Consumption	6.5W	
Cable Length	Pre-wired with 140mm of cable.	
Min. Service Life	5000 hours (tested under extreme conditions)	

**Circuit Tester**

Circuit Tester for quick fault tracing in vehicle electrical systems. Sturdy metal construction with screw-off cap and testing needle.



<b>8PD 003 798-001</b>	<b>7013</b>
Bulb to suit	24V (M243)
Suits	6, 12 and 24V applications



CRIMPING TOOL - INSULATED TERMINALS

8PE 905 478-012 8271

Specially designed for the handyman and hobbyist, a useful crimping tool that cuts cable, strips cable insulation and crimps all popular insulated terminals.



CRIMPING TOOL - INSULATED TERMINALS

8PE 905 478-021 8272

Spring return hand grips. Cuts and strips insulation from cable measuring 2.5-6mm in diameter (0.75-6mm<sup>2</sup>). Crimps all popular insulated and non-insulated terminals. Cuts bolts with metric threads M2.6, M3, M3.5, M4, M5.



CRIMPING TOOL - INSULATED TERMINALS

8PE 905 479-001 8273

Adjustable ratchet mechanism and spring release ensures a perfect crimp every time for insulated terminals.



CRIMPING TOOL - NON-INSULATED TERMINALS

8PE 905 479-021 8274

Adjustable ratchet mechanism and spring release ensures a perfect crimp every time for open barrel non-insulated terminals.





## DT Connectors

Environmentally sealed connectors rated at -55° to 125°C. Supplied with solid copper crimp contacts, locking wedges and large I.D. removable contacts.

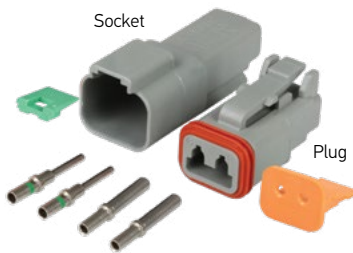


Maximum Load	13A - all contacts	
Spare Parts	8KW 959 764-812	Small I.D. female contact to suit plug
	8KW 959 764-832	Small I.D. male contact to suit socket
	8KW 959 764-852	Large I.D. female contact to suit plug
	8KW 959 764-872	Large I.D. male contact to suit socket
	9GD 959 777-802	Sealing plug

Small I.D. = 1.7mm up to 1.5mm<sup>2</sup> cable. Large I.D. = 2.0mm up to 2.0mm<sup>2</sup> cable. Plug and socket kits come complete with terminals and seals.

### 2 Pole Plug and Socket

Supplied with 4 solid copper crimp contacts and 2 locking wedges. Bulk pack supplied with 2 pole connectors and contacts to suit.



2 POLE PLUG AND SOCKET		
8KW 959 772-821	4960	
2 POLE PLUG		
8JA 959 772-811	4960MF	PACK OF 10
2 POLE SOCKET		
9MK 910 095-002	4960FM	PACK OF 10
2 POLE PLUG KIT		
8JA 959 736-811	4960P	

### 3 Pole Plug and Socket

Supplied with 6 solid copper crimp contacts and 2 locking wedges.



8KW 959 772-851	4961
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### 4 Pole Plug and Socket

Supplied with 8 solid copper crimp contacts and 2 locking wedges.



8KW 959 772-861	4962
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8KW 959 774-821	4963
6 PIN PLUG KIT	
8JA 959 736-801	4963P

### 6 Pole Plug and Socket

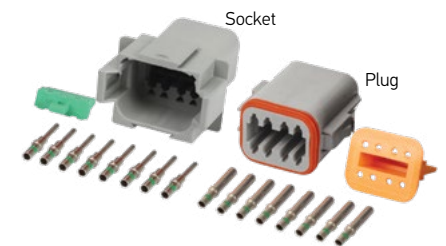
Supplied with 12 solid copper crimp contacts and 2 locking wedges.



8KW 959 774-831	4964
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### 8 Pole Plug and Socket

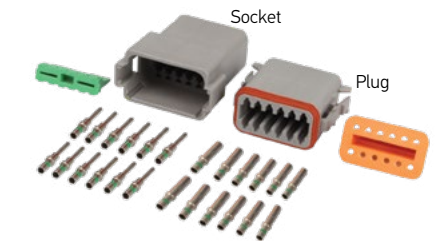
Supplied with 16 solid copper crimp contacts and 2 locking wedges.



8KW 959 774-841	4965
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### 12 Pole Plug and Socket

Supplied with 24 solid copper crimp contacts and 2 locking wedges.



CRIMPING TOOL - DT TERMINALS	
8PE 980 837-001	8275

Specially designed crimping tool with multiple jaws for an even crimp of DT terminals.

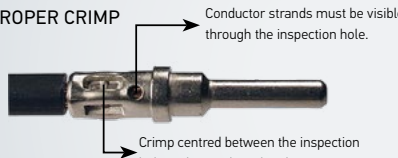


CRIMPING TOOL - DT TERMINALS	
8PE 910 118-011	

Capable of crimping both male and female DT terminals.



**A PROPER CRIMP**



**Visual Inspection Checklist**

- ✓ NO damaged wire strands.
- ✓ NO missing wire strands.
- ✓ ALL strands entered into contact barrel.

## Super Seal Connectors

Super seal connector housings were developed to satisfy increasing requirements for safety and reliability in the field of electrical connections. The connectors can be connected to existing components and used with the equipment presently in use in the automotive industry (sensors, oil pressure sensors, water temperature monitoring circuits, etc.).

- IP 67 (Protection against dust and temporary water immersion)
- Robust and reliable contact. Max. current 14A.
- Prefabricated secondary lock ensures that the terminal is plugged into the housing correctly and prevents slipping out of the connector.



For 'P' and 'S' versions only the bare connector is supplied. Select appropriate seals and terminals to suit. Plug and socket kits come complete with terminals and seals.



1 POLE PLUG AND SOCKET		
8KW 959 881-515	4981P (Pack of 4)	PLUG
8KW 959 881-015	4981S (Pack of 4)	SOCKET



2 POLE PLUG AND SOCKET		
8KW 959 881-811	4982 (Kit)	PLUG AND SOCKET
8KW 959 881-525	4982P (Pack of 4)	PLUG
8KW 959 881-005	4982S (Pack of 4)	SOCKET

Spare Part 9HB 343 699-011 Rubber sealing boot – cable support



3 POLE PLUG AND SOCKET		
8KW 959 881-821	4983 (Kit)	PLUG AND SOCKET
8KW 959 881-535	4983P (Pack of 3)	PLUG
8KW 959 881-035	4983S (Pack of 3)	SOCKET

Spare Part 9HB 332 130-011 Rubber sealing boot – cable support



4 POLE PLUG AND SOCKET		
8KW 959 881-831	4984 (Kit)	PLUG AND SOCKET
8KW 959 881-545	4984P (Pack of 3)	PLUG
8KW 959 881-045	4984S (Pack of 3)	SOCKET



5 POLE PLUG AND SOCKET		
8JA 959 881-555	4985P (Pack of 2)	PLUG
8JA 959 881-055	4985S (Pack of 2)	SOCKET



6 POLE PLUG AND SOCKET		
8KW 959 881-565	4986P (Pack of 2)	PLUG
8KW 959 881-065	4986S (Pack of 2)	SOCKET

**ACCESSORIES**

<b>8JA 009 256-801</b>	<b>4980</b>
Contents	5 of each connector, plug and socket 100 8KW 959 882-511 Socket terminals 100 8KW 959 882-111 Plug terminals 100 9GD 959 883-001 Yellow seals 100 9GD 959 883-501 Red cavity plugs

**Super Seal Connector Kit**

Kit contains a variety of super seal connectors.



FEMALE TERMINALS FOR PLUG - PACK OF 50		
<b>8KW 959 882-811</b>	<b>9498001</b>	<b>0.35 - 0.50mm<sup>2</sup> CABLE</b>
<b>8KW 959 882-511</b>	<b>9498002</b>	<b>0.50 - 1.50mm<sup>2</sup> CABLE</b>



MALE TERMINALS FOR SOCKET - PACK OF 50		
<b>8KW 959 882-411</b>	<b>9498003</b>	<b>0.35 - 0.50mm<sup>2</sup> CABLE</b>
<b>8KW 959 882-111</b>	<b>9498004</b>	<b>0.50 - 1.50mm<sup>2</sup> CABLE</b>



SEALS FOR PLUG/SOCKET - PACK OF 50		
<b>9GD 959 883-201</b>	<b>9498005</b>	<b>GREEN SEAL</b>
<b>9GD 959 883-001</b>	<b>9498006</b>	<b>YELLOW SEAL</b>
<b>9GD 959 883-301</b>	<b>9498007</b>	<b>RED SEAL</b>
<b>9GD 959 883-501</b>	<b>9498009</b>	<b>RED CAVITY PLUG (NO HOLE)</b>



To Suit	9GD 959 883-201	Cable insulation 1.2 - 1.6mm diameter
	9GD 959 883-001	Cable insulation 1.7 - 2.4mm diameter
	9GD 959 883-301	Cable insulation 2.5 - 3.3mm diameter
	9GD 959 883-501	Red cavity plug (no hole)

RUBBER SEALING BOOT - CABLE SUPPORT		
<b>9HB 343 699-011</b>	<b>9498205</b>	<b>2 PIN CONNECTOR</b>
<b>9HB 332 130-011</b>	<b>9498305</b>	<b>3 PIN CONNECTOR</b>



SUPER SEAL TOOLS		
<b>8PE 863 807-391</b>	<b>9498020</b>	<b>CONTACT EXTRACTION TOOL</b>
<b>8PE 863 807-381</b>	<b>9498021</b>	<b>SECONDARY LOCK TOOL</b>

Extraction tools for the popular super seal range of connectors, to assist in disassembly if required.

CRIMPING TOOL - SUPER SEAL TERMINALS		
<b>8PE 980 838-001</b>	<b>8298</b>	

Crimping tool designed for use with super seal connector terminals.



**ACCESSORIES**



8KW 980 300-002  
Blister pack shown



8KW 980 300-003  
Bulk pack shown



PUSH-ON FEMALE TERMINALS

Part Number	Type	Quantity Per Pack	Size	Cable
8KW 980 300-002	8200	BLISTER PACK	20	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 300-003	8500	BULK PACK	100	
8KW 980 300-102	8201	BLISTER PACK	20	6.3mm 4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 300-103	8501	BULK PACK	100	
8KW 980 300-202	8202	BLISTER PACK	15	6.3mm 5 to 6mm cable 2.9 to 4.59mm <sup>2</sup> cable
8KW 980 300-203	8502	BULK PACK	100	

FULLY INSULATED FEMALE TERMINALS

8KW 980 300-012	8204	BLISTER PACK	12	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 300-013	8504	BULK PACK	100	
8KW 980 300-112	8205	BLISTER PACK	12	6.3mm 4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 300-113	8505	BULK PACK	100	

PUSH-ON 2-WAY MALE AND FEMALE TERMINALS

8KW 980 300-022	8210	BLISTER PACK	15	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 300-023	8510	BULK PACK	100	
8KW 980 300-122	8211	BLISTER PACK	12	6.3mm 4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 300-123	8511	BULK PACK	100	
8KW 980 302-012	8212	BLISTER PACK	15	6.3mm
8KW 980 302-013	8512	BULK PACK	100	

BLADE MALE TERMINALS

8KW 980 300-402	8213	BLISTER PACK	15	6.3mm 2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 300-403	8513	BULK PACK	100	
8KW 980 300-502	8214	BLISTER PACK	12	6.3mm 4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 300-503	8514	BULK PACK	100	
8KW 980 300-602	8215	BLISTER PACK	10	6.3mm 5 to 6mm cable 2.9 to 4.59mm <sup>2</sup> cable
8KW 980 300-603	8515	BULK PACK	100	

BULLET SINGLE MALE CONNECTORS

8KW 980 301-402	8220	BLISTER PACK	12	2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 301-403	8520	BULK PACK	100	
8KW 980 301-502	8221	BLISTER PACK	14	4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 301-503	8521	BULK PACK	100	

BULLET SINGLE FEMALE CONNECTORS

8KW 980 301-002	8222	BLISTER PACK	12	2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 301-003	8522	BULK PACK	100	
8KW 980 301-102	8223	BLISTER PACK	14	4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 301-103	8523	BULK PACK	100	

CABLE CONNECTORS				
Part Number		Type	Quantity Per Pack	Size Cable
8KW 980 302-002	8230	BLISTER PACK	15	2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 302-003	8530	BULK PACK	100	
8KW 980 302-102	8231	BLISTER PACK	15	4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 302-103	8531	BULK PACK	100	
8KW 980 302-202	8232	BLISTER PACK	10	5 to 6mm cable 2.9 to 4.59mm <sup>2</sup> cable
8KW 980 302-203	8532	BULK PACK	100	



QUICK CONNECT CABLE CONNECTORS				
8KW 980 302-322	8235	BLISTER PACK	15	
8KW 980 302-323	8535	BULK PACK	50	



With the use of pliers, connects splices and insulates 0.75 to 1.13mm<sup>2</sup> (2.5 to 3mm) cable.

EYE TERMINALS					
8KW 980 303-002	8240	BLISTER PACK	25	4.3mm	
8KW 980 303-003	8540	BULK PACK	100		
8KW 980 303-012	8241	BLISTER PACK	20	5mm	2.5 to 3mm cable 0.75 to 1.13mm <sup>2</sup> cable
8KW 980 303-013	8541	BULK PACK	100		
8KW 980 303-022	8242	BLISTER PACK	15	6.3mm	
8KW 980 303-023	8542	BULK PACK	100		
8KW 980 303-102	8243	BLISTER PACK	20	5mm	
8KW 980 303-103	8543	BULK PACK	100		
8KW 980 303-112	8244	BLISTER PACK	20	6.3mm	4mm cable. 1.84mm <sup>2</sup> cable
8KW 980 303-113	8544	BULK PACK	100		
8KW 980 303-122	8245	BLISTER PACK	15	8.4mm	
8KW 980 303-123	8545	BULK PACK	100		
8KW 980 303-202	8246	BLISTER PACK	12	6.3mm	
8KW 980 303-203	8546	BULK PACK	100		
8KW 980 303-212	8247	BLISTER PACK	12	8.4mm	5 to 6mm cable 2.9 to 4.59mm <sup>2</sup> cable
8KW 980 303-213	8547	BULK PACK	100		
8KW 980 303-222	8248	BLISTER PACK	10	9.5mm	
8KW 980 303-223	8548	BULK PACK	100		



NON-INSULATED BRASS LUCAR TERMINAL - WITH LOCK TAB					
8KW 905 512-032	8573	BULK PACK	100	6.3mm	1.84mm <sup>2</sup> cable



### Garage/Auto Electrical Assortment Kit - 186 Piece

Assortment containing 12 types of HELLA connectors/terminals specifically designed to meet the requirements of the automotive industry.



<b>8KW 980 300-821</b>	<b>8282</b>
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Contents A quantity of 12 complete packs.

Part Number	Description	Quantity
8KW 980 300-002	8200 Push-on female terminal	20
8KW 980 300-102	8201 Push-on female terminal	20
8KW 980 300-202	8202 Push-on female terminal	15
8KW 980 300-022	8210 Push-on 2-way male and female terminal	15
8KW 980 300-122	8211 Push-on 2-way male and female terminal	12
8KW 980 302-002	8230 Cable connector	15
8KW 980 302-102	8231 Cable connector	15
8KW 980 302-202	8232 Cable connector	10
8KW 980 303-012	8241 Eye terminal	20
8KW 980 303-112	8244 Eye terminal	20
8KW 980 303-212	8247 Eye terminal	12

### Insulated Terminal and Connector Kit - 800 Piece

Assortment containing 16 types of HELLA connectors/terminals specifically designed to meet the requirements of the automotive industry. Kit includes crimp tool 8PE 905 478-021.



<b>8KW 980 300-831</b>	<b>8284</b>
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Contents 16 types of HELLA connectors/terminals.

Part Number	Description	Quantity
8KW 980 300-002	8200 Push-on female terminal	50
8KW 980 300-102	8201 Push-on female terminal	50
8KW 980 300-012	8204 Fully Insulated female terminal	50
8KW 980 300-112	8205 Fully Insulated female terminal	50
8KW 980 300-402	8213 Blade male terminal	50
8KW 980 300-502	8214 Blade male terminal	50
8KW 980 301-402	8220 Bullet single male connector	50
8KW 980 301-502	8221 Bullet single male connector	50
8KW 980 301-002	8222 Bullet single female connector	50
8KW 980 301-102	8223 Bullet single female connector	50
8KW 980 302-002	8230 Cable connector	50
8KW 980 302-102	8231 Cable connector	50
8KW 980 302-322	8235 Quick connect cable connector	50
8KW 980 303-012	8241 Eye terminal	50
8KW 980 303-112	8244 Eye terminal	50
8KW 980 303-212	8247 Eye terminal	50
8PE 905 478-021	8272 Crimping tool – Insulated terminals	1

**Heat Shrink Insulated Crimp  
Terminals Pack of 10**

Fully insulated cable terminals with shrink-on nylon cap either with hot air gun or other heat source. Shrinking temperature 135°C.

Part Number		Type	Colour	Cable Size	Description
8KW 980 300-042	8204S	BLADE RECEPTACLES	RED	0.5 - 1mm <sup>2</sup>	To suit blade terminals 6.3 x 0.8mm. Fully insulated.
8KW 980 300-142	8205S		BLUE	1.5 - 2.5mm <sup>2</sup>	
8KW 980 300-432	8213S	BLADE TERMINALS	RED	0.5 - 1mm <sup>2</sup>	Size of blade terminal 6.3 x 0.8mm.
8KW 980 300-532	8214S		BLUE	1.5 - 2.5mm <sup>2</sup>	
8KW 980 303-032	8240S	RING CONNECTORS	RED	0.5 - 1mm <sup>2</sup>	To suit M4 pins.
8KW 980 303-192	8236S		BLUE	1.5 - 2.5mm <sup>2</sup>	
8KW 980 303-042	8241S	RING CONNECTORS	RED	0.5 - 1mm <sup>2</sup>	To suit M5 pins.
8KW 980 303-132	8243S		BLUE	1.5 - 2.5mm <sup>2</sup>	
8KW 980 303-332	8249S		YELLOW	4 - 6mm <sup>2</sup>	
8KW 980 303-142	8244S	RING CONNECTORS	BLUE	1.5 - 2.5mm <sup>2</sup>	To suit M6 pins.
8KW 980 303-232	8246S		YELLOW	4 - 6mm <sup>2</sup>	
8KW 980 303-182	8245S	RING CONNECTORS	BLUE	1.5 - 2.5mm <sup>2</sup>	To suit M8 pins.
8KW 980 303-242	8247S		YELLOW	4 - 6mm <sup>2</sup>	
8KW 980 302-032	8230S	BUTT CONNECTORS	RED	0.5 - 1mm <sup>2</sup>	Cable to cable connection
8KW 980 302-132	8231S		BLUE	1.5 - 2.5mm <sup>2</sup>	
8KW 980 302-232	8232S		YELLOW	4 - 6mm <sup>2</sup>	



**Heat Shrink Insulated Crimp  
Connectors - Pack of 100**

Part Number		Type	Colour	Cable Size	Description
8KW 980 302-033	8530S	BUTT CONNECTORS	RED	0.5 - 1mm <sup>2</sup>	Cable to cable connection
8KW 980 302-133	8531S		BLUE	1.5 - 2.5mm <sup>2</sup>	
8KW 980 302-233	8532S		YELLOW	4 - 6mm <sup>2</sup>	

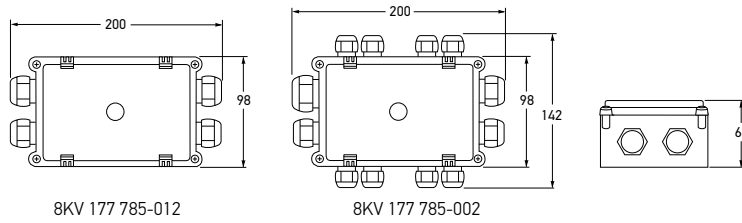


8KW 980 302-133  
Box shown



**Cable Junction Box**

Compact cable junction box with the option of 4 or 12 inlet/outlets, and outer cable size from Ø10mm to Ø17mm. Complete with connecting cartridge allowing 14 separate groups of connections (6 x 8-way and 8 x 4-way) all using 6.3mm flat blade connectors. The heavy duty nylon housing will withstand common lubricants found underneath truck and trailers, and is safe to clean with high pressure washing equipment.



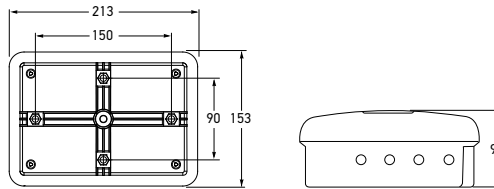
<b>8KV 177 785-012</b>	<b>2770</b>	<b>4 OUTLETS</b>
<b>8KV 177 785-002</b>	<b>2771</b>	<b>12 OUTLETS</b>
Fittings	8KV 177 785-012 4 x Ø13mm 8KV 177 785-002 1 x Ø17mm + 3 x Ø13mm + 8 x Ø10mm	
Protection	IP 69K (Protection against dust and high pressure/steam jet cleaning)	
Plug Cartridge	14 separate connection groups.	



Connecting cartridge

**Junction Box - Heavy Duty**

Heavy duty nylon junction box. Box can be opened without tools via a single stainless steel bolt. Large sealing gasket withstands high pressure water blasting. Internal mounting plate for fitment of connector blocks and/or relays by self-tapping screws. Large size allows for multiple connections.



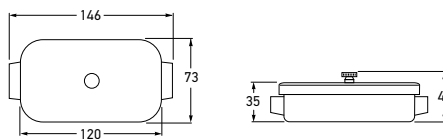
<b>8JB 959 540-011</b>	<b>2755</b>
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Open view

**Cable Junction Box**

8 Screw connections.



<b>8KV 002 143-033</b>	<b>2757</b>
------------------------	-------------

Cable Suitable for medium cable up to 6mm<sup>2</sup> cross-sectional area.

**Cable Junction Box**

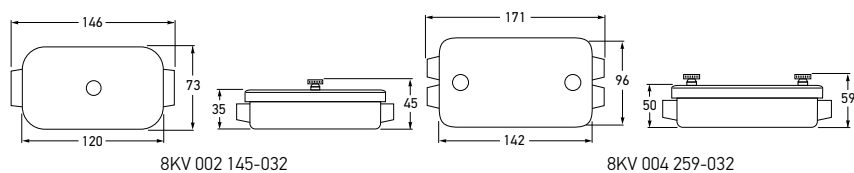
8 pole, 8 double flat plug connection.



8KV 004 259-032



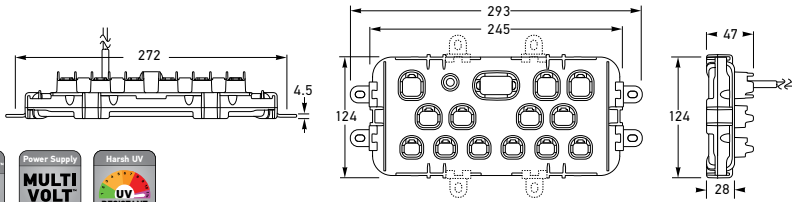
8KV 002 145-032



<b>8KV 002 145-032</b>	<b>2758</b>
<b>8KV 004 259-032</b>	<b>2759</b>

To Suit 8KV 002 145-032 Suitable for medium cable up to 6mm<sup>2</sup> cross-sectional area.  
8KV 004 259-032 Suitable for heavy cable up to 10mm<sup>2</sup> cross-sectional area.

ACCESSORIES



**8JE 233 496-001**

Housing material	ASA Plastic				
Mounting	Horizontal or Vertical, Surface mount (4x mounting clips provided)				
Plug Connections	Deutsch DT Plugs (not provided)				
Voltage	Multivolt™ suitable for 12 and 24 volt systems				
Current per output pin	Temp (°C)	20	25	40	50
	Max Output (A)	1.85	1.74	1.53	1.37
Maximum Input	13A (Total system)				
Operating Temp	-40° to 50° Celsius				
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)				
Accessory	8HG 244 382-001	Protective Cover			
	8HS 248 756-007	DT Locking Clip (Pack of 15)			
	See pages 246-247 for DT connectors.				

**LED Lamp Distribution Box**

HELLA's revolutionary LED Lamp Distribution Box is the quick connect, easy trouble shooting solution for fitting LED lamps to heavy trailers and custom vehicles.

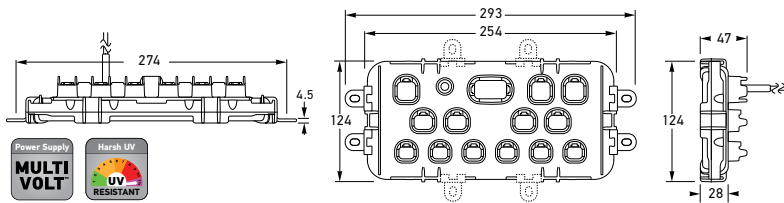
The LED Lamp Distribution Box is designed with integrated Deutsch DT connector sockets that provide easy and reliable lamp connection. Internal electronics isolate individual circuits and reduce lamp outage to ensure a long life and reliable lamp operation. A completely sealed housing and durable materials provide protection against water, dust and high pressure/steam jet cleaning.



Locking Clip



Protective Cover



**8JE 233 496-011**

Housing material	ASA Plastic				
Mounting	Horizontal or Vertical, Surface mount (4 x mounting clips provided)				
Plug Connections	Deutsch DT Plugs (not provided)				
Voltage	Multivolt™ suitable for 12 and 24 volt systems				
Current per output pin	Temp (°C)	20	25	40	50
	Max Output - DT Output Sockets M/N/O/P (A)	5.00	4.85	4.15	3.85
	Max Output - All other DT Output Sockets (A)	1.85	1.74	1.53	1.37
Maximum Input	25A (Total system)				
Operating Temp	-40° to 50° Celsius				
Protection	IP 6K7 (Protection against dust and temporary water immersion) IP 6K9K (Protection against dust and high pressure/steam jet cleaning)				
Accessory	8HG 244 382-001	Protective Cover			
	8HS 248 756-007	DT Locking Clip (Pack of 15)			
	See pages 246-247 for DT connectors.				

**LED Lamp Distribution Box - High Current Version**

The high current version of HELLA's revolutionary LED Lamp Distribution Box has been upgraded to include 4 high current outputs to allow connection of higher power reversing lamps, work lamps and other equipment. The distribution box is designed with integrated Deutsch DT connector sockets to provide a quick connect, easy trouble shooting solution for fitting LED lamps to heavy trailers and custom vehicles.

Internal electronics isolate individual circuits and reduce lamp outage to ensure a long life and reliable lamp operation. A completely sealed housing and durable materials provide protection against water, dust and high pressure/steam jet cleaning.



Locking Clip



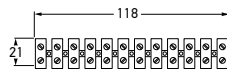
Protective Cover

**Cable Connectors**

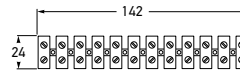
Strip of 12 brass connectors. Flexible plastic.



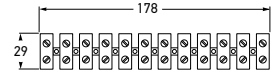
8KV 002 137-005



8KV 002 139-004



8KV 002 140-003



8KV 002 141-001

8KV 002 137-005	8455	CABLES UP TO 2.5MM (0.75MM <sup>2</sup> )
8KV 002 139-004	8452	CABLES UP TO 3MM (1.13MM <sup>2</sup> )
8KV 002 140-003	8453	CABLES UP TO 4MM (2.90MM <sup>2</sup> )
8KV 002 141-001	8454	CABLES UP TO 6MM (4.59MM <sup>2</sup> )



8KV 002 139-004

8KV 002 140-003

8KV 002 141-001

**Connector Kits**

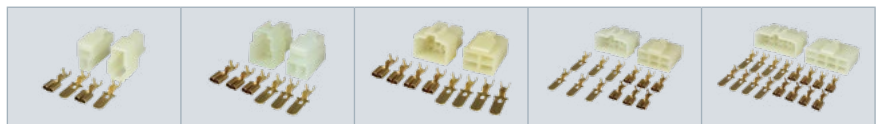
White connector kits. Includes brass terminals.



8KW 980 309-001	4991	1 POLE
8KW 980 309-011	4992	2 POLE
8KW 980 309-021	4993	3 POLE
8KW 980 309-031	4994	4 POLE
8KW 980 309-041	4995	6 POLE
8KW 980 309-051	4996	8 POLE

Max. Load 10A per terminal.

Max. Cable Size 2.0mm<sup>2</sup>



8KW 980 309-011

8KW 980 309-021

8KW 980 309-031

8KW 980 309-041

8KW 980 309-051

**Insulation Tape - Black**

Black insulation tape. Made from lead free PVC. Suitable for fine wire, cables and applications requiring non-corrosive tape.

9MJ 905 490-001	8312	18MM X 20M
Tape Thickness	0.18mm	
Elongation at Break	215%	

**Duct Tape - Black**

Premium quality plastic coated rayon fabric backing, with a high tack aggressive rubber based adhesive on one side.

9MJ 905 490-051	8320	48MM X 30M
-----------------	------	------------



## Nylon Cable Ties

100% 6/6 nylon cable ties. Very flexible locking latch. Bell-mouthed head allows easier threading than previous ties. Strongest possible locking power without damaging the serrations of the tie. Quick fastening and simple locking mechanism. Black ties are UV resistant.



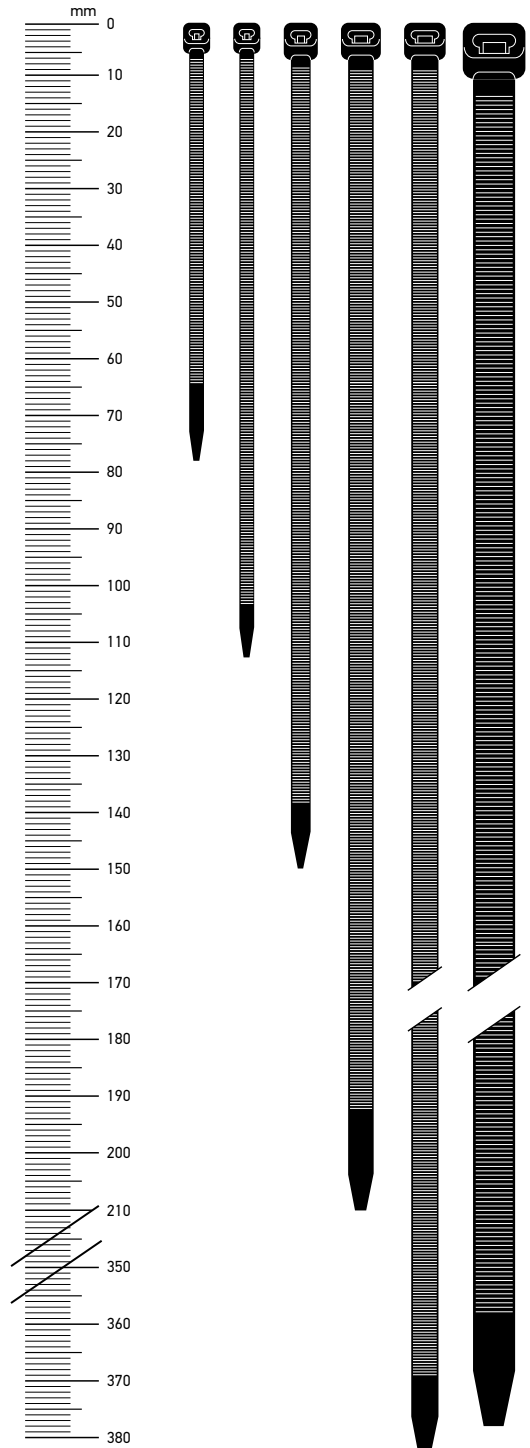
WHITE CABLE TIES			
	Quantity 100 Per Pack	Length	Width
8HL 905 491-161	8344	191mm	4.8mm
8HL 905 491-181	8345	368mm	4.8mm



BLACK UV RESISTANT CABLE TIES			
	Quantity 10 Per Pack	Length	Width
8HL 905 491-051	8334UV	208mm	4.6mm
8HL 905 491-071	8335UV	390mm	4.8mm
8HL 905 491-091	8336UV	380mm	7.6mm

BLACK UV RESISTANT CABLE TIES			
	Quantity 100 Per Pack	Length	Width
8HL 905 491-112	8341UV	80mm	2.5mm
8HL 980 340-001	8342UV	103mm	2.5mm
8HL 980 341-001	8343UV	147mm	3.2mm
8HL 980 342-001	8344UV	208mm	4.6mm
8HL 980 343-001	8345UV	390mm	4.8mm
8HL 980 344-001	8346UV	380mm	7.6mm

BLACK UV RESISTANT CABLE TIES			
	Quantity 1000 Per Pack	Length	Width
8HL 980 342-007	8344UVBULK	208mm	4.6mm



Standard Blade Fuses (ATS)

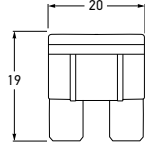
- Pack of 10



8JS 711 683-822



8JS 980 305-012



8JS 980 305-022 8JS 980 305-032 8JS 980 305-042



8JS 980 305-052 8JS 980 305-062 8JS 980 305-072

8JS 711 683-822	8770		PURPLE	3A
8JS 980 305-012	8771		TAN	5A
8JS 980 305-022	8772		BROWN	7.5A
8JS 980 305-032	8773		RED	10A
8JS 980 305-042	8774		BLUE	15A
8JS 980 305-052	8775		YELLOW	20A
8JS 980 305-062	8776		WHITE	25A
8JS 980 305-072	8777		GREEN	30A

Motorist Fuse Assortment (ATS)

- Pack of 10

10 popular blade fuses – ideal for the glove box.

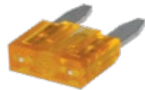


8JS 980 305-811	8779	
Contents	1 x 7.5A 2 x 10A 2 x 15A 2 x 20A 2 x 25A 1 x 30A	

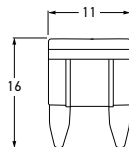
Mini Blade Fuses (ATN) - Pack of 10



8JS 980 305-104



8JS 980 305-112



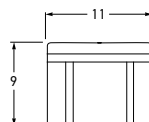
8JS 980 305-122 8JS 980 305-132 8JS 980 305-142



8JS 980 305-152 8JS 980 305-162 8JS 980 305-172

8JS 980 305-104	8770MINI		PURPLE	3A
8JS 980 305-112	8771MINI		TAN	5A
8JS 980 305-122	8772MINI		BROWN	7.5A
8JS 980 305-132	8773MINI		RED	10A
8JS 980 305-142	8774MINI		BLUE	15A
8JS 980 305-152	8775MINI		YELLOW	20A
8JS 980 305-162	8776MINI		WHITE	25A
8JS 980 305-172	8777MINI		GREEN	30A

Low Profile Blade Fuses (ATT)  
- Pack of 10



8JS 980 305-204	8770LP		PURPLE	3A
8JS 980 305-212	8771LP		TAN	5A
8JS 980 305-222	8772LP		BROWN	7.5A
8JS 980 305-232	8773LP		RED	10A
8JS 980 305-242	8774LP		BLUE	15A
8JS 980 305-252	8775LP		YELLOW	20A
8JS 980 305-262	8776LP		WHITE	25A
8JS 980 305-272	8777LP		GREEN	30A



8JS 980 305-204



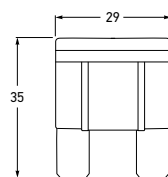
8JS 980 305-212



8JS 980 305-222 8JS 980 305-232 8JS 980 305-242



8JS 980 305-252 8JS 980 305-262 8JS 980 305-272

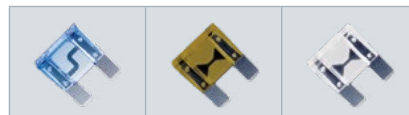


Maxi Blade Fuses (ATM)  
- Single Pack

8JS 980 305-502	8790		YELLOW	20A
8JS 980 305-512	8791		GREEN	30A
8JS 980 305-522	8792		ORANGE	40A
8JS 980 305-532	8793		RED	50A
8JS 980 305-542	8794		BLUE	60A
8JS 980 305-552	8796		BROWN	70A
8JS 980 305-562	8795		WHITE	80A
8JS 980 305-582	8797		PURPLE	100A



8JS 980 305-512 8JS 980 305-522 8JS 980 305-532



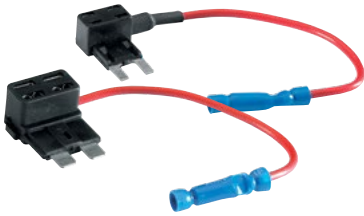
8JS 980 305-542 8JS 980 305-552 8JS 980 305-562



8JS 980 305-582

**Auxiliary Blade Fuse Holder**

Add on fuse holder. Fuse holder allows you to piggy back off the original fuse with an additional holder and separate fused circuit. Comes complete with 4 fuses (3A, 5A, 7.5A and 10A).



8JD 743 557-802	8701		MINI
8JD 743 557-812	8703		STANDARD/ATS
To Suit		Mobile phones, stereos, amplifiers, navigation systems and fridges.	

**Pre-wired Blade Fuse Holders**



8JD 980 307-022      8JS 980 307-032

8JD 980 307-012	8713		MINI
8JD 980 307-022	8714		STANDARD
8JS 980 307-032	8715		MAXI

**Single Maxi Blade Fuse Holder**

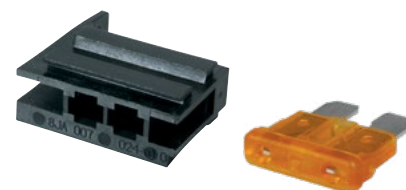
Splash-proof fuse holder with plastic cover. For loads up to 60A. Complete with 2 sets of terminals, set one for 2.5 - 6mm<sup>2</sup> and set two for 5 - 10mm<sup>2</sup>.



8JD 743 708-002	8707
Cable	Suitable for cables up to 2.5mm <sup>2</sup> - 10mm <sup>2</sup> cross sectional area.
Fuse Type	Maxi Blade Fuses (ATM)
See page 259 for full listing of Maxi Blade Fuses (ATM)	

### Single Blade Fuse Holder

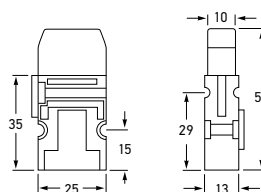
Several holders may be joined together or mated with 8JA 003 526-004 (relay holder). Comes complete with 2 terminals.



<b>8JA 007 024-002</b>	<b>8704</b>
Cable	Suitable for cable up to 2.5mm <sup>2</sup> cross sectional area.
Fuse Type	Standard Blade Fuses (ATS)
See page 258 for full listing of Standard Blade Fuses (ATS)	

### Single Blade Fuse Holder

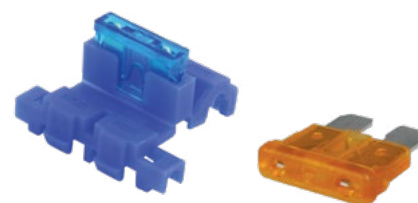
30 amps maximum. May be interlocked face to face or end to end. Complete with transparent dust cover lid and snap-in terminals.



<b>8JD 005 235-003</b>	<b>8718</b>
Cable	Suitable for cable up to 2.90mm <sup>2</sup> cross sectional area.
Fuse Type	Standard Blade Fuses (ATS)
See page 258 for full listing of Standard Blade Fuses (ATS)	

### Single In-line Blade Fuse Holder

20 amps maximum. Complete with 15A blade fuse. Quick connect type.

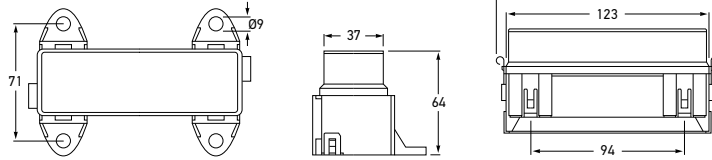


<b>8JD 980 307-002</b>	<b>8719</b>
Cable	Suitable for cable up to 1.84mm <sup>2</sup> cross sectional area.



**Blade Fuse Box - 16 Fuses**

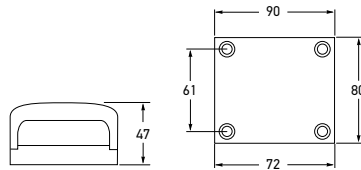
16-way fuse box featuring black plastic housing with secondary locks, transparent cover and sealing gasket. Supplied with mounting brackets.



<b>8JD 905 524-032</b>	<b>8724</b>
Number of Fuses	16
Fuse Type	6 x 10A 6 x 15A 2 x 20A 2 X 25A

**Blade Fuse Box - 6 Fuses**

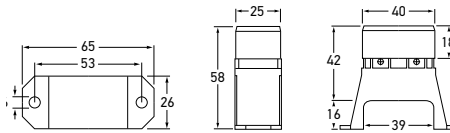
Black plastic housing with transparent snap-fit lid and 6.3mm male blade terminals. 5mm diameter stud input. Complete with 2 spare fuse holders and label set.



<b>8JD 005 993-093</b>	<b>8725</b>
Number of Fuses	6
Fuse Type	3 x 10A 3 x 15A

**Blade Fuse Box - 4 Fuses**

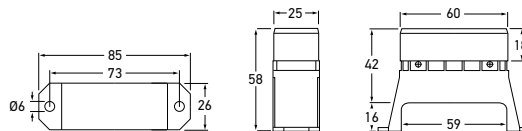
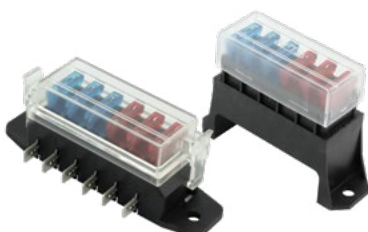
Black plastic housing with transparent snap-fit lid. Flat plug connections.



<b>8JD 905 524-002</b>	<b>8720</b>	<input type="checkbox"/>
<b>8JD 905 524-041</b>	<b>8720S</b>	<input checked="" type="checkbox"/> <b>SIDE CONNECTORS</b>
Number of Fuses	4	
Fuse Type	2 x 10A 2 x 15A	

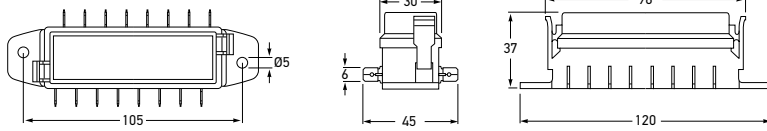
**Blade Fuse Box - 6 Fuses**

Black plastic housing with transparent snap-fit lid. Flat plug connections.



<b>8JD 905 524-012</b>	<b>8721</b>	<input type="checkbox"/>
<b>8JD 905 523-011</b>	<b>8721S</b>	<input checked="" type="checkbox"/> <b>SIDE CONNECTORS</b>
Number of Fuses	6	
Fuse Type	3 x 10A 3 x 15A	

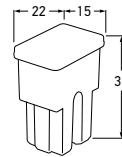
ACCESSORIES



8JD 905 524-022	8722	
8JD 905 524-051	8722S	SIDE CONNECTORS
Number of Fuses	8	
Fuse Type	4 x 10A 4 x 15A	

Blade Fuse Box - 8 Fuses

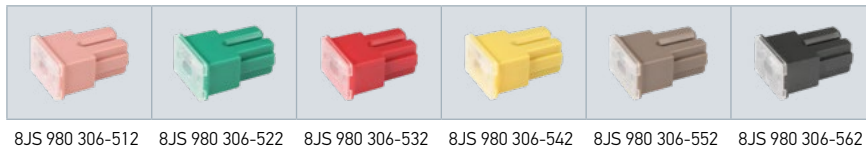
Black plastic housing with transparent snap-fit lid. Flat plug connections.



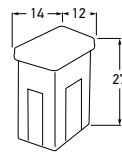
Fusible Link - Female

Female plug-in fuse link.

8JS 980 306-502	8790FLFS		LIGHT BLUE	20A
8JS 980 306-512	8791FLFS		PINK	30A
8JS 980 306-522	8792FLFS		GREEN	40A
8JS 980 306-532	8793FLFS		RED	50A
8JS 980 306-542	8794FLFS		YELLOW	60A
8JS 980 306-552	8795FLFS		BROWN	70A
8JS 980 306-562	8796FLFS		BLACK	80A
8JS 980 306-572	8797FLFS		BLUE	100A



8JS 980 306-512 8JS 980 306-522 8JS 980 306-532 8JS 980 306-542 8JS 980 306-552 8JS 980 306-562



Mini Fusible Link - Female

Female mini plug-in fuse link.

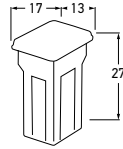
8JS 980 306-302	8790FLFE		LIGHT BLUE	20A
8JS 980 306-312	8791FLFE		PINK	30A
8JS 980 306-322	8792FLFE		GREEN	40A
8JS 980 306-332	8793FLFE		RED	50A
8JS 980 306-342	8794FLFE		YELLOW	60A
8JS 980 306-352	8795FLFE		BROWN	70A
8JS 980 306-362	8796FLFE		BLACK	80A



8JS 980 306-322 8JS 980 306-332 8JS 980 306-342 8JS 980 306-352 8JS 980 306-362

Mini Fusible Link - Female

Mini female plug-in fuse link.

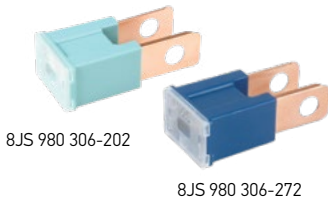
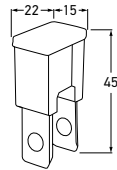


8JS 980 306-402	8790FLFM		LIGHT BLUE	20A
8JS 980 306-412	8791FLFM		PINK	30A
8JS 980 306-422	8792FLFM		GREEN	40A
8JS 980 306-432	8793FLFM		RED	50A
8JS 980 306-442	8794FLFM		YELLOW	60A
8JS 980 306-452	8795FLFM		BROWN	70A
8JS 980 306-462	8796FLFM		BLACK	80A
8JS 980 306-472	8797FLFM		BLUE	100A

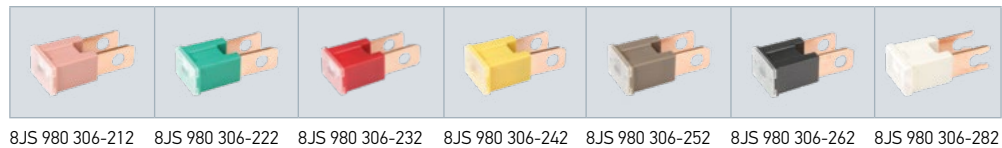


Fusible Link - Male

Male bolt-in fuse link.

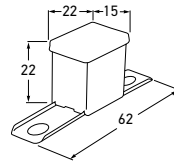


8JS 980 306-202	8790FLM		LIGHT BLUE	20A
8JS 980 306-212	8791FLM		PINK	30A
8JS 980 306-222	8792FLM		GREEN	40A
8JS 980 306-232	8793FLM		RED	50A
8JS 980 306-242	8794FLM		YELLOW	60A
8JS 980 306-252	8795FLM		BROWN	70A
8JS 980 306-262	8796FLM		BLACK	80A
8JS 980 306-272	8797FLM		BLUE	100A
8JS 980 306-282	8798FLM		WHITE	120A

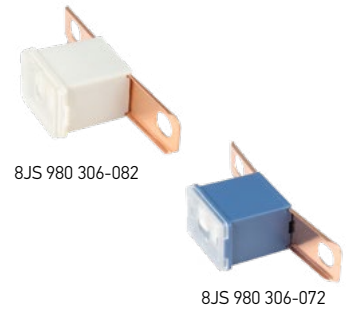


Fusible Link, Male - L-Type Long

Male L-type fuse link with long leg.



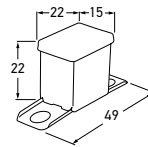
8JS 980 306-012	8791FLB		PINK	30A
8JS 980 306-022	8792FLB		GREEN	40A
8JS 980 306-032	8793FLB		RED	50A
8JS 980 306-042	8794FLB		YELLOW	60A
8JS 980 306-052	8795FLB		BROWN	70A
8JS 980 306-062	8796FLB		BLACK	80A
8JS 980 306-072	8797FLB		BLUE	100A
8JS 980 306-082	8798FLB		WHITE	120A



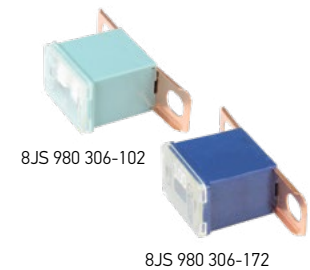
8JS 980 306-012   8JS 980 306-022   8JS 980 306-032   8JS 980 306-042   8JS 980 306-052   8JS 980 306-062   8JS 980 306-082

Fusible Link, Male - L-Type Short

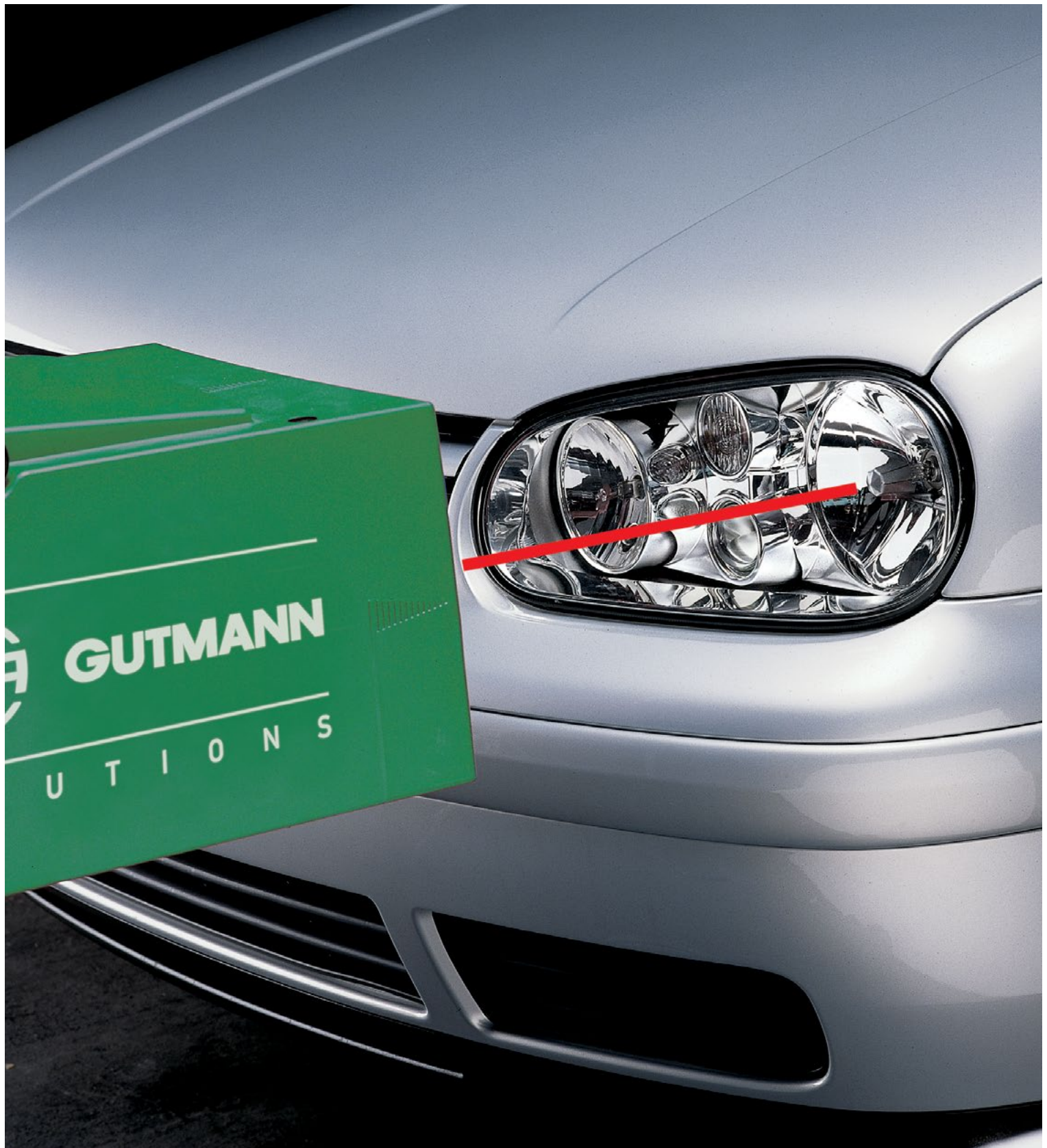
Male L-type fuse link with short leg.



8JS 980 306-102	8790FLBS		LIGHT BLUE	20A
8JS 980 306-112	8791FLBS		PINK	30A
8JS 980 306-122	8792FLBS		GREEN	40A
8JS 980 306-132	8793FLBS		RED	50A
8JS 980 306-142	8794FLBS		YELLOW	60A
8JS 980 306-152	8795FLBS		BROWN	70A
8JS 980 306-162	8796FLBS		BLACK	80A
8JS 980 306-172	8797FLBS		BLUE	100A
8JS 980 306-182	8798FLBS		WHITE	120A



8JS 980 306-112   8JS 980 306-122   8JS 980 306-132   8JS 980 306-142   8JS 980 306-152   8JS 980 306-162   8JS 980 306-182



The HELLA Headlamp Aimer is a precision workshop instrument designed to accurately check vehicle headlamps. It was developed especially for use in professional workshops and vehicle testing stations.

# HELLA BEAMSETTERS

**Precision Headlamp Adjustment.** The importance of regular checking and re-adjustment of headlamps emerges clearly from the fact that about 33% of all vehicles coming in for this service have incorrectly adjusted headlamps. In about half these cases the headlamp beams are too high and dazzle oncoming traffic, while in the remaining cases the headlamps are too low or point left or right, reducing the driver's field of vision and driving safety.

The HELLA Headlamp Aimer provides high accuracy in lighting checks and is also able to test the latest in new technology headlamps. The beamsetter box, the heart of the unit, is constructed of impact and corrosion resistant material that withstands even aggressive fluids used in workshops.

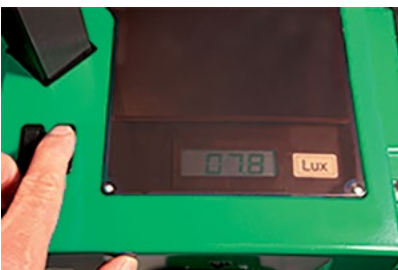
Its functional design allows quick, precise and simple headlamp adjustment. Precision workshop instrument with wide-band sight aligner for quick and precise checking and setting of headlamps, auxiliary driving and fog lamps on all vehicles. The unit features a sturdy base, large viewing screen and a combination volt and light output meter and easy height adjustment.

## HELLA Beamsetter

Standard Beamsetter with digital voltage and lux readings.

8PA 007 732-311    SEG 700DLX (Includes laser sight aligner)

Digital indication of illuminance.



Features include:

- Wide band sight aligner
- Combination volt and light output meter
- Sturdy base
- Large viewing screen
- Easy height adjustment
- Spare parts available

