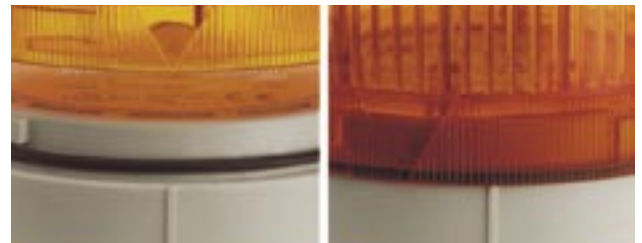


- ▶ modularly construction with bayonet locking system
- ▶ fast and easy to operate , mount, configurate and change of modules
- ▶ troublefree anf fingersafe bulb change at any position without using any tools



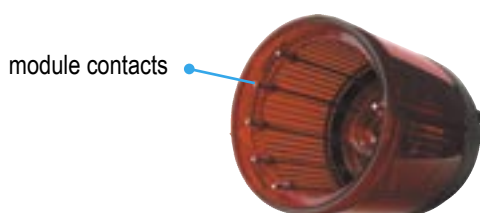
QUICK MOUNT SYSTEM „FOOT ADAPTER“ (Pat.No. 501053) (Base type BFR)



Quick mounting system "Foot adapter" saves the customer the electrical connection and eases considerably mounting of signal tower for machine manufactures and their customers. Detailed description see page 49.

Features

- ▶ modularly designed, versatile, flexible and powerful signal towers
- ▶ any desired combination possibilities for many different kind of applications
- ▶ complete range of visual and audible modules in all conventional voltages
- ▶ extensive mounting offers
- ▶ 6 lens colours
- ▶ PLC ft (leakage/inrush current)
- ▶ UL certified, Protection class IP 65, UL type 4, 4X, 13



CONFIGURATION

SIGNAL TOWER moduSIGNAL70



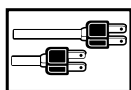
LIGHT MODULES	Light source	Type
Steady light	bulb or LED-bulb	SLL
Flashing light		SLB
Strobe light	xenon tube	SLF
LED-Steady light	LED	SDC
LED-Flashing light		SDA
LED-Rotating light		SDR
LIGHT-BUZZER-MODULES		
Steady light - Buzzer	bulb or LED-bulb	SLP
Steady light - Buzzer light and tone separately addressable		SLD
Flashing light - Buzzer		SBP
Strobe light - Buzzer	xenon tube	SFP
LED-Steady light - Buzzer	LED	SCP
LED-Flashing light - Buzzer		SAP
LED-Rotating light - Buzzer		SRP
PIEZO BUZZER MODULES	Volume	
Continuous or pulsing tone and sound pressure selectable with DIP switches	85-107 dB	SDE
		SPE
Continuous or pulsing tone externally switchable, sound pressure selectable with DIP switches		SDZ
SPZ		
ELECTRONIC SOUNDER MODULES		
(15 tone types available – pls. refer to sound table page 47.)		
Tone type selectable by DIP switch	64-103 dB	STE
2 tone types externally switchable		STZ

continuous or pulsing tone and volume (92-107 dB) selectable by DIP switch



BASES





Technical data

for all modulSIGNAL50 modules/products:

Housing material	polycarbonate, grey or black
Lens material	polycarbonate
Lens colours	amber, red, clear, blue, green, yellow
Terminals	up to 2,5 mm ²
Temperature range	-25 °C bis +70 °C

Light modules		SLL	SLB	SLF	SDC	SDA	SDR	
Bulb W		7 W						
Socket (BA 15 d)		X						
Flashing-/Strobe frequency			2 Hz	1,4 Hz		2 Hz		
Strobe energy				3 J				
Lifetime				~ 5 Mio. flashes				
Light source LED						X		
Light emission		360°						
Light type		steady light	flashing light	strobe light	LED-steady light	LED-flashing light	LED-rotating light	
Leakage		3						
Nominal current	12 V	max. 7 W		285 mA	120 mA			
	24 V			24 mA	70 mA			
	110/120 V			50 mA	43 mA			
	230/240 V			35 mA	41 mA			
Protection class		IP 65, UL type 4, 4X, 13						
Weight		100 g						
Light Buzzer modules		SLP	SLD	SBP	SFP	SCP	SAP	SRP
Bulb		7 W						
Socket (BA15 d)		X						
Flashing-/Strobe frequency			2 Hz	1,4 Hz				
Strobe energy				3 J				
Light source LED						X		
Light emission		360°						
Light type		steady light	flashing light	strobe light	LED-steady l.	LED-flashing l.	LED-rotating light	
Leakage		3 mA						
Nominal current	12 V	5 W, 27 mA		260 mA	150 mA			
	24 V	7 W, 45 mA		170 mA	110 mA			
	110/120 V	7 W, 43 mA		93 mA	64 mA			
	230/240 V	7 W, 40 mA		66 mA	61 mA			
Tone type		continuous- and pulsing tone (selectable by DIP switch)						
Tone frequency		3.300 Hz						
Sound pressure (dB)		92-107 dB (selectable by DIP switch)						
Protection class		IP 65, UL type 4, 4X, 13						
Weight		130 g						
Piezo Buzzer and Sounder modules		SDE	SPE	SDZ	SPZ	STE	STZ	
Tone type		continuous and pulsing tone				15 tone types		
Tone frequency		3.300 Hz						
Sound pressure (dB)		92 / 107 dB	85-97 dB	92 / 107 dB	85-97 dB	64 - 103 dB		
		selectable by DIP switch				potentiometer		
Leakage		3 mA						
Nominal current	12 V			27 mA	35 mA			
	24 V			45 mA	75 mA			
	110/120 V			43 mA	65 mA			
	230/240 V			40 mA	65 mA			
Tone selection		DIP switch		externally switchable		DIP switch		
Protection class		IP 65, UL type 4, 4X, 13	IP 54, UL type 4, 4X, 13	IP 65, UL type 4, 4X, 13	IP 54, UL type 4, 4X, 13	IP 54, UL type 4, 4X, 13		
Weight		90 g	100 g		110 g	140 g		
Weight (Bases)		pls. refer to general weight list on page 156-159						



BMW

BMV

BMR / BSR

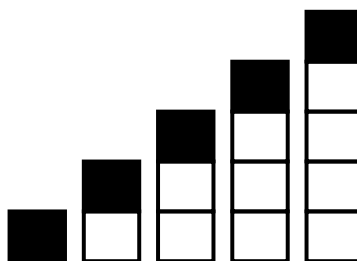
BMR + Pole connection boxes

BWS

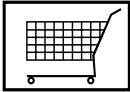
BSS

BFR

Module combinations



Can be used on position	1	2	3	4	5	Remark
Light modules (all types)	OK	OK	OK	OK	OK	to be used in any position
Buzzer modules, tone type internally switchable	OK	OK	OK	OK	OK	to be used only on top position
Buzzer-Modules, tone type externally switchable	OK	OK	OK	OK	-	to be used only on top position

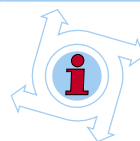


Order data

Type	Light modules	Light options		required positions	Order No.		Nominal voltage (V)
		Bulb	LED-bulb		Housing grey	Housing black	
SLL	Steady light	GL	LLL, LLB	1	210 10C 900	210 50C 900	up to 250 V AC/DC
SLB	Flashing light	GL	LLL	1	220 10C 405	220 50C 405	12-24 V AC/DC
					220 10C 310	220 50C 310	110/120 V AC
					220 10C 313	220 50C 313	230/240 V AC
					230 10C 405	230 50C 405	12-24 V AC/DC
SLF	Strobe light	xenon tube		1	230 10C 310	230 50C 310	110/120 V AC
					230 10C 313	230 50C 313	230/240 V AC
					211 10C 404	211 50C 404	12 V AC/DC
SDC	LED-Steady light			1	211 10C 405	211 50C 405	24 V AC/DC
					211 10C 310	211 50C 310	110/120 V AC
					211 10C 313	211 50C 313	230/240 V AC
					221 10C 404	221 50C 404	12 V AC/DC
SDA	LED-Flashing light	LED		1	221 10C 405	221 50C 405	24 V AC/DC
					221 10C 310	221 50C 310	110/120 V AC
					221 10C 313	221 50C 313	230/240 V AC
SDR	LED-Rotating light			1	231 10C 404	231 50C 404	12 V AC/DC
					231 10C 405	231 50C 405	24 V AC/DC
					231 10C 310	231 50C 310	110/120 V AC
					231 10C 313	231 50C 313	230/240 V AC
SLP	Steady light - Buzzer	GL	LLL, LLB	1	250 10C 404	250 50C 404	12 V AC/DC
					250 10C 405	250 50C 405	24 V AC/DC
					250 10C 310	250 50C 310	110/120 V AC
					250 10C 313	250 50C 313	230/240 V AC
SLD	Steady light - Buzzer Light/Tone separately switchable	GL	LLL, LLB	2	212 10C 404	212 50C 404	12 V AC/DC
					212 10C 405	212 50C 405	24 V AC/DC
					212 10C 310	212 50C 310	110/120 V AC
					212 10C 313	212 50C 313	230/240 V AC
SBP	Flashing light - Buzzer	GL	LLL	1	260 10C 404	260 50C 404	12 V AC/DC
					260 10C 405	260 50C 405	24 V AC/DC
					260 10C 310	260 50C 310	110/120 V AC
					260 10C 313	260 50C 313	230/240 V AC
SFP	Strobe light - Buzzer	xenon tube		1	270 10C 404	270 50C 404	12 V AC/DC
					270 10C 405	270 50C 405	24 V AC/DC
					270 10C 310	270 50C 310	110/120 V AC
					270 10C 313	270 50C 313	230/240 V AC
SCP	LED-Steady light - Buzzer			1	251 10C 404	251 50C 404	12 V AC/DC
					251 10C 405	251 50C 405	24 V AC/DC
					251 10C 310	251 50C 310	110/120 V AC
					251 10C 313	251 50C 313	230/240 V AC
SAP	LED-Flashing light - Buzzer	LED		1	261 10C 404	261 50C 404	12 V AC/DC
					261 10C 405	261 50C 405	24 V AC/DC
					261 10C 310	261 50C 310	110/120 V AC
					261 10C 313	261 50C 313	230/240 V AC
SRP	LED-Rotating light - Buzzer			1	271 10C 404	271 50C 404	12 V AC/DC
					271 10C 405	271 50C 405	24 V AC/DC
					271 10C 310	271 50C 310	110/120 V AC
					271 10C 313	271 50C 313	230/240 V AC

ORDER DATA ACCESSORIES		
Type	Nominal Voltage (V)	Order No.
GL01	12 V 5 W	890 010 904
GL02	24 V 7 W	890 010 905
GL03	48 V 7 W	890 010 908
GL04	60 V 7 W	890 010 909
GL05	110/120 V 7 W	890 010 910
GL06	230/240 V 7 W	890 010 913

Type	Nominal Voltage (V)	Order No.
LED-Lampe BA15d		
Steady light		
LLL	12 V AC/DC	893 00C 404
	24 V AC/DC	893 00C 405
	48 V AC/DC	893 00C 408
	110/120 V AC	893 00C 310
	230/240 V AC	893 00C 313
Flashing light		
LLB	12 V AC/DC	893 01C 404
	24 V AC/DC	893 01C 405
	48 V AC/DC	893 01C 408
	110/120 V AC	893 01C 310
	230/240 V AC	893 01C 313

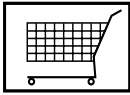


NOTE:

Light sources have to be ordered separately.
(pls. refer to order datas- accessories)

Colour code for lens

1	amber	5	blue
2	red	6	green
4	clear	7	yellow



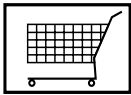
Order data



Type	Piezo-Buzzer-Modules	Tone options		required positions	Order No..		Nominal voltage (V)
		Tone type	Sound pressure		Housing grey	Housing black	
SDE	Piezo Buzzer, IP 65 tone type and sound pressure selectable by DIP switch	<input type="checkbox"/> continuous	<input type="checkbox"/> ~ 107 dB	1	247 100 404	247 500 404	12 V AC/DC
		<input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 92 dB		247 100 405	247 500 405	24 V AC/DC
					247 100 310	247 500 310	110/120 V AC
SPE	Piezo Buzzer, IP 54 tone type and sound pressure selectable by DIP switch	<input type="checkbox"/> continuous	<input type="checkbox"/> ~ 97 dB	1	243 100 404	243 500 404	12 V AC/DC
		<input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 85 dB		243 100 405	243 500 405	24 V AC/DC
					243 100 310	243 500 310	110/120 V AC
					243 100 313	243 500 313	230/240 V AC
SDZ	Piezo Buzzer, IP 65 tone type externally switchable sound pressure adjustable by DIP switch	continuous/ pulsing	<input type="checkbox"/> ~ 107 dB	2	248 100 404	248 500 404	12 V AC/DC
			<input type="checkbox"/> ~ 92 dB		248 100 405	248 500 405	24 V AC/DC
					248 100 310	248 500 310	110/120 V AC
					248 100 313	248 500 313	230/240 V AC
SPZ	Piezo Buzzer, IP 54 tone type externally switchable sound pressure adjustable by DIP switch	continuous/ pulsing	<input type="checkbox"/> ~ 97 dB	2	244 100 404	244 500 404	12 V AC/DC
			<input type="checkbox"/> ~ 85 dB		244 100 405	244 500 405	24 V AC/DC
					244 100 310	244 500 310	110/120 V AC
					244 100 313	244 500 313	230/240 V AC
Electronic Sounder-Modules							
STE	Electronic Sounder, IP 54 tone type selectable by DIP switch, upper/lower frequency and speed infinitely variable	15 tone types see sound table	64-103 dB	1	241 100 405	241 500 405	12-24 V AC/DC
					241 100 310	241 500 310	110/120 V AC
					241 100 313	241 500 313	230/240 V AC
STZ	Electronic Sounder, IP 54 2 tone types externally switchable, upper/lower frequency and speed infinitely variable	15 tone types see sound table	64-103 dB	2	242 100 405	242 500 405	12-24 V AC/DC
					242 100 310	242 500 310	110/120 V AC
					242 100 313	242 500 313	230/240 V AC

Tone table								
DIP switch	STE (tone 1 only)					STZ (tone 1 + 2)		
	Tone 1	Speed	Tone frequency (Hz)		Volume	Tone 2		
			lower	upper				
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Triangle tone		7-22 Hz	500 Hz	1.500 Hz	80-100 dB(A)	Continuous tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Continuous tone		-	500-1.500 Hz		83-103 dB(A)	Changing tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Continuous tone		-	500-1.500 Hz		83-103 dB(A)	Interrupted tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Interrupted tone		0.5-1.5 Hz	500-1.500 Hz		83-103 dB(A)	Three tone gong	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Interrupted tone		0.5-1.5 Hz	500-1.500 Hz		83-103 dB(A)	Siren (non repeating)	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Changing tone		0.5-1.5 Hz	500-1.500 Hz	500-1.500 Hz	83-103 dB(A)	DIN Emergency Signal	DIN 33404
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Saw tooth tone ascending		0.5-1.5 Hz	500-1.500 Hz	500-1.500 Hz	83-103 dB(A)	Continuous tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Saw tooth tone descending		0.5-1.5 Hz	500-1.500 Hz	500-1.500 Hz	83-103 dB(A)	Interrupted tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Sinus wave tone		0.5-1.5 Hz	500-1.500 Hz	500-1.500 Hz	82-102 dB(A)	DIN Emergency Signal	DIN 33404
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	DIN Emergency Signal	DIN 33404	1 Hz	500 Hz	1.200 Hz	82-102 dB(A)	Three tone gong (n. repeat.)	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Siren (non repeating)		2-4 s	500 Hz	1.500 Hz	83-103 dB(A)	Triangle tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Signal horn (Continuous tone)		-	100-350 Hz		64-80 dB(A)	Continuous tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Three tone gong		2-4 s	660-550-440 Hz		76-95 dB(A)	Sinus wave tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Two tone gong		2-3 s	550-440 Hz		75-93 dB(A)	Two tone gong (n. repeat.)	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 0 1	Gong		1-3 s		500-1.500 Hz	75-93 dB(A)	Continuous tone	

set to maximum (+)



Order data

Type	Bases	Order No.	
		Housing grey	Housing black
BMW	Base for horizontal mounting	200 100 900	200 500 900
BMV	Base for vertical mounting	200 200 900	200 600 900
BMR	Pole mount base on aluminium tube with plastic foot	200 30L 900	200 70L 900
BSR	Pole mount base on stainless steel tube with zinc die-cast foot, powder coated	200 31L 900	200 71L 900
BWS	Pole mount base for horizontal mounting with screw	200 33L 900	200 73L 900
BSS	Set for vertical mounting (for BWS)	200 400 900	200 800 900
BFR	Pole mount base on aluminium tube with foot adapter for quick mounting	200 34L 900	200 74L 900

Cap - is automatically included with each base

Length code for tubes

				L
1	50 mm (not for BFR)	5	500 mm	
2	100 mm	6	600 mm	
3	250 mm	7	800 mm	
4	400 mm			

ACCESSORIES POLE CONNECTION BOXES

For additional installation possibilities of pole mount assemblies BMR:

- Surface cable conduits in protection class IP 65 – horizontally or vertically
- Model with magnetic base for mobile mounting, signalling device in protection class IP 65 on metal surfaces

BDW



BDM



BDV



Type	Pole connection box	Order No.		Weight (g)
		Housing grey	Housing black	
BDW	for horizontal mounting	841 10T 900	841 50T 900	90
BDV	for vertical mounting	841 11T 900	841 51T 900	110
BDM	for magnetic mounting	841 12T 900	841 52T 900	330

Code for thread

			T
1	M 20	5	PG 16
2	NPT 1/2"		

AS-INTERFACE



AS-Interface implementation possibilities into Auer signal towers modul SIGNAL70

- internal power supply (via the AS-Interface cable) 24V: BAZ AS Interface module
- 2. external power supply - (via Junction Box BDW or BDV) – up to 4 modules addressable.

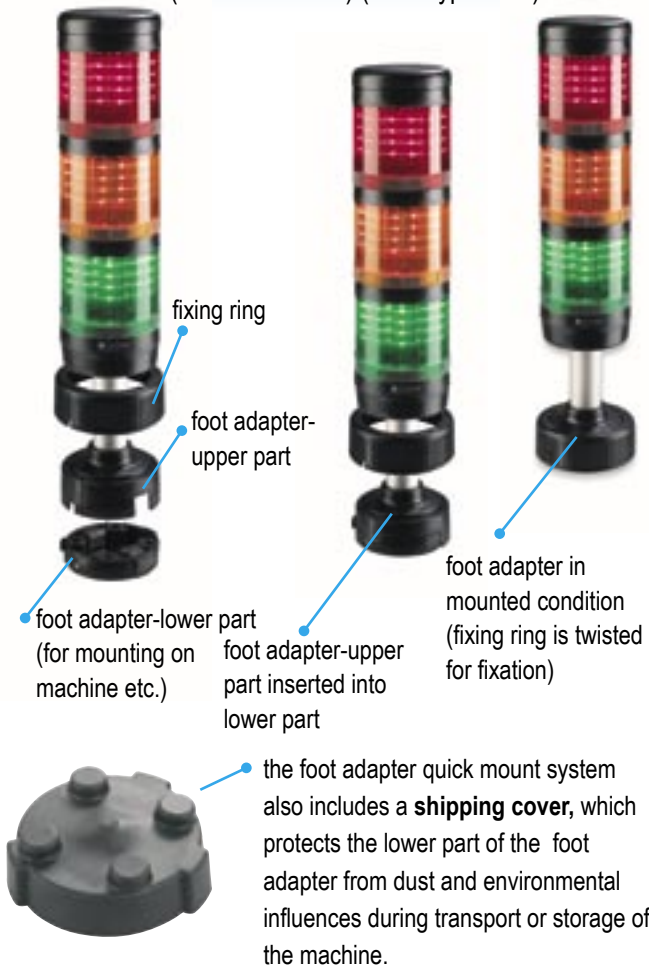
Further technical data, drawings and information about AS-Interface please refer to page 142-143.



Type	AS-Interface	Order No.	
		Housing grey	Housing black
Internal power supply:			
BAZ	AS-Interface Module for internal power supply, 24 V	280 100 510	280 500 510
External power supply:			
AWBMR	AS-Interface pole connection box for horizontal mounting and pole mount base on aluminium tube with plastic foot	201 30L 520	201 70L 520
AVBMR	AS-Interface pole connection box for vertical mounting and pole mount base on aluminium tube with plastic foot	201 31L 520	201 71L 520

QUICK MOUNT SYSTEM „FOOT ADAPTER“

(Pat.No. 501053) (Base type BFR)



the foot adapter quick mount system also includes a **shipping cover**, which protects the lower part of the foot adapter from dust and environmental influences during transport or storage of the machine.

Function

- ▶ the signal tower with pole mount base on aluminium tube with foot adapter for quick mounting (BFR) is electrically pre-wired
- ▶ the foot adapter lower part is mounted on the machine etc. and electrically connected
- ▶ the signal tower with foot adapter upper part is inserted into the lower part and firmly mounted by twisting the fixing ring
- ▶ the signal tower is immediately fully operable

Advantages

- ▶ simple and cost saving disassembly of signal tower for transport of machine etc.
- ▶ quick cost saving installation of complete signal tower at client
- ▶ immediate function, no electrical connection required at client
- ▶ safe transport of signal tower (separately packed)
- ▶ additional locking option of signal tower with safety screw that cannot be lost
- ▶ signal tower fits only in one position onto the foot adapter lower part – no wrong installation of signal tower possible

How to order Signal Tower moduSIGNAL70

Configuration 24 V AC/DC	Position	Type	Order No. Catalogue	correct order no.
Steady light blue	5	SLL	210 50C 900	210 505 900
Steady light amber	4	SLL	210 50C 900	210 501 900
Steady light clear	3	SLL	210 50C 900	210 504 900
Steady light red	2	SLL	210 50C 900	210 502 900
Steady light green	1	SLL	210 50C 900	210 506 900
Base for horizontal mounting		BMW	200 500 900	200 500 900
5 x bulb		GL06	890 010 913	890 010 913

Configuration 230 V AC	Position	Type	Order No. Catalogue	correct order no.
Electronic Sounder module 15 tone types	3	STE	241 100 313	241 100 313
LED-flashing light red	2	SDA	221 10C 313	221 102 313
LED-steady l. green	1	SDC	211 10C 313	211 106 313
Base for vertical mounting		BMV	200 200 900	200 200 900

Configuration 230 V AC	Position	Type	Order No. Catalogue	correct order no.
Flashing module, red	1	SBP	260 50C 313	260 502 313
Base for horizontal mounting		BMW	200 500 900	200 500 900
1 x bulb		GL06	890 010 913	890 010 913

Configuration 24 V AC/DC	Position	Type	Order No. Catalogue	correct order no.
LED-rotating light-buzzer module, red	1	SRP	271 50C 405	271 502 405
Pole mount base on stainless steel tube with zinc die cast foot, powder coated, 100 mm long		BSR	200 71L 900	200 712 900

Configuration 24 V AC/DC	Position	Type	Order No. Catalogue	correct order no.
Strobe light blue	1	SLF	230 10C 405	230 105 405
Pole mount base on aluminium tube with plastic foot, 100 mm long		BMR	200 30L 900	200 302 900
Pole connection box for horizontal mounting		BDW	841 10T 900	841 101 900

