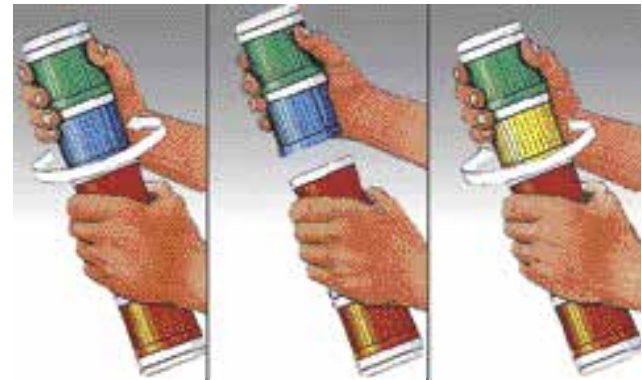
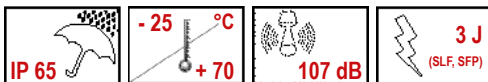
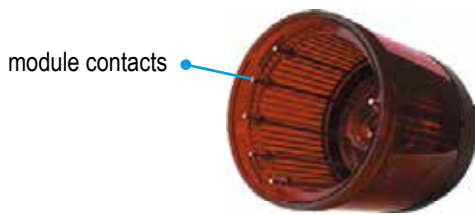


## Features

- Modularly designed, versatile, flexible and powerful signal towers
- Any desired combination possible for many different kinds of applications
- Complete range of visual and audible modules in all conventional voltages
- Extensive mounting options
- 6 lens colours
- PLC fit (leakage/inrush current)
- Protection class IP 65, certified to UL type 4/4X/13
- Integration into field bus system with AS-Interface module BAZ/VAZ (detailed information on page 32)
- Modularly construction with bayonet locking system
- Fast and easy to operate, mount, configurate and change of modules
- Troublefree and fingersafe bulb change at any position without using any tools

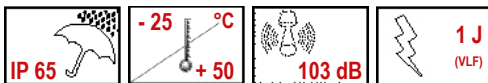
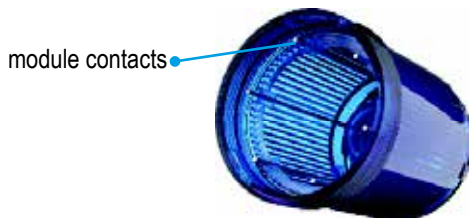


### modulSIGNAL70



### QUICK MOUNT BASE „FOOT ADAPTER“ (Pat.Nr. 501053)

### modulSIGNAL50



The quick mount system "foot adapter" is available for all sizes and series of signal towers. For detailed information, see page 33.



modul **SIGNAL70**

modul **SIGNAL50**



Ø 70 mm

Ø 50 mm

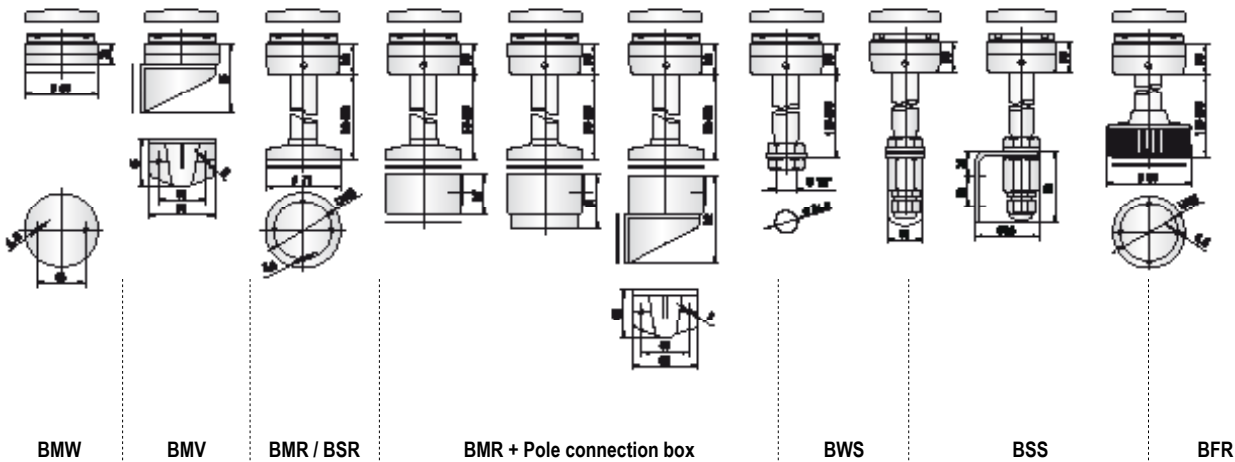


## Technical data































### Signal towers modulSIGNAL70

Housing	polycarbonate		Terminal	up to 2,5 mm <sup>2</sup>				
Housing colour	grey RAL 7035, black RAL 9005		Temperature range	-25 °C to +70 °C				
Lens	polycarbonate		Protection class	IP 65 / UL type 4/4X/13				
Lens colour	amber, red, clear, blue, green, yellow		Number of optional modules	up to 5				
<b>Light modules</b>								
	<b>SLL</b>		<b>SLB</b>	<b>SLF</b>	<b>SDC</b>	<b>SDA</b>	<b>SDR</b>	
Light type	steady light		flashing light	strobe light	LED steady light	LED flashing light	LED rotating light	
Light source	7 W bulb			xenon tube	LED	LED	LED	
Socket	BA 15 d			---	---	---	---	
Flashing/strobe frequency	---	2 Hz		1,4 Hz	---	2 Hz		
Strobe energy	---	---		3 J	---	---	---	
Light emission	360°							
Leakage	> 0,003 A							
Nominal current (A)	12 V	max. 7 W		0,285	0,120			
	24 V			0,180	0,070			
	110/120 V			0,050	0,043			
	230/240 V			0,035	0,041			
Life time	~ 5 mio. flashes							
Protection class	IP 65, UL type 4/4X/13							
Weight (g)	100							
<b>Light-buzzer modules</b>								
	<b>SLP</b>		<b>SLD</b>	<b>SBP</b>	<b>SFP</b>	<b>SCP</b>	<b>SAP</b>	<b>SRP</b>
Light type	steady light		flashing light	strobe light	LED steady light	LED flashing light	LED rotating light	
Light source	7 W bulb			xenon tube	LED	LED	LED	
Socket	BA15 d			---	---	---	---	
Flashing/strobe frequency	---	---	2 Hz	1,4 Hz	---	---	---	
Strobe energy	---	---	---	3 J	---	---	---	
Light emission	360°							
Leakage	0,003 A							
Nominal current (A)	12 V	5 W, 0,027		0,310	0,150			
	24 V	7 W, 0,045		0,220	0,110			
	110/120 V	7 W, 0,043		0,093	0,064			
	230/240 V	7 W, 0,040		0,075	0,061			
Tone/light selection	synchronous	separately switchable	synchronous	synchronous	synchronous	synchronous	synchronous	
Tone type	continuous or pulsing tone (selectable via DIP switch)							
Tone frequency	3.300 Hz							
Max. sound pressure	92 / 107 dB (selectable via DIP switch)							
Protection class	IP 65, UL type 4/4X/13							
Weight (g)	130							
<b>Piezo buzzer and sounder modules</b>								
	<b>SDE</b>		<b>SPE</b>	<b>SDZ</b>	<b>SPZ</b>	<b>STE</b>	<b>STZ</b>	
Tone type	continuous and pulsing tone					15 tone types		
Tone frequency	3.600 Hz		2.600 Hz	3.600 Hz	2.600 Hz	100-1.500 Hz		
Tone selection	DIP switch			externally switchable		DIP switch, externally switchable		
Max. sound pressure	92/107 dB		85/97 dB	92/107 dB	83/97 dB	64-103 dB		
Sound pressure selection	DIP switch					potentiometer		
Sound emission	360°							
Leakage	0,003 A							
Nominal current (A)	12 V	0,018				0,030		
	24 V	0,040				0,065		
	110/120 V	0,043				0,060		
	230/240 V	0,040				0,060		
Protection class	IP 65, UL type 4/4X/13		IP 54, UL type 12	IP 65, UL type 4/4X/13	IP 54, UL type 12	IP 54, UL type 12		
Weight (g)	90		100		110		140	
Weight (bases)	please refer to general weight list							

modul **SIGNAL70**



Further information on page 25

Tone table								
STE (tone 1 only)								
DIP switch	Tone 1	Speed	Tone frequenz (Hz)		Sound pressure	STZ (tone 1 + 2)		
			lower	upper		Tone 2		
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 0	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"/> 1 0	Continuous tone		-	-	500-1.500 Hz	83-103 dB (A)	Changing tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 0	Continuous tone		-	500-1.500 Hz	-	83-103 dB (A)	Interrupted tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 0	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"/> 1 0	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"/> 1 0	Changing tone		0.5-1.5 Hz	500-1.500 Hz	500-1.500 Hz	83-103 dB (A)	DIN emergency signal	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 0	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"/> 1 0	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"/> 1 0	Sinus wave tone		0.5-1.5 Hz	500-1.500 Hz	500-1.500 Hz	82-102 dB (A)	DIN emergency signal	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 0	DIN emergency signal		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"/> 1 0	Siren (non repeating)		2-4 s	500-1.500 Hz	500-1.500 Hz	83-103 dB (A)	Triangle tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 0	Signal horn (Continuous t.)		-	100-350 Hz	-	64-80 dB (A)	Continuous tone	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 1 0	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"/> 1 0	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"/> 1 0	Gong		1-3 s	500-1.500 Hz	-	75-93 dB (A)	Continuous tone	

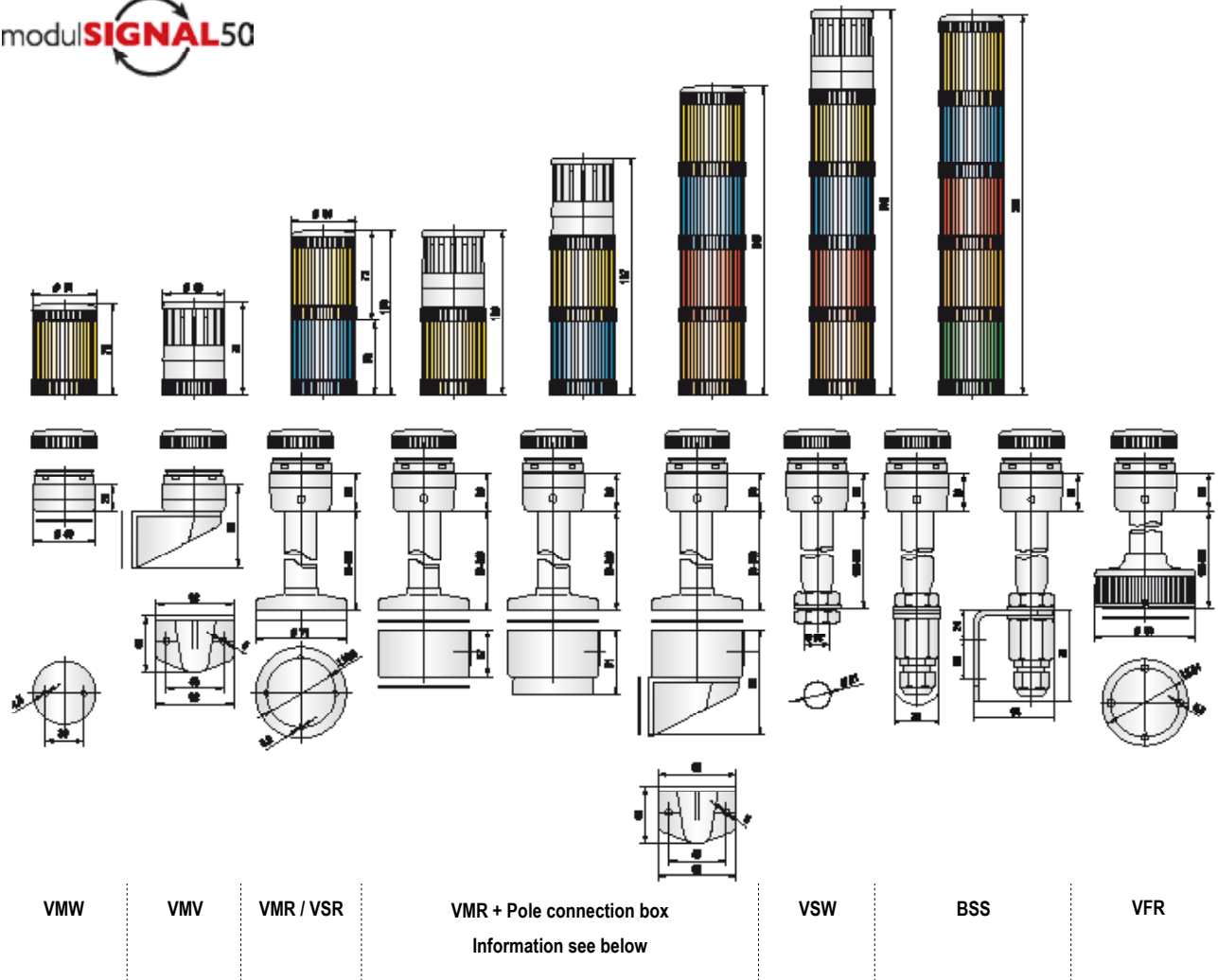


## Technical data

### Signal towers modulSIGNAL50

Housing	polycarbonate		Terminal	up to 2,5 mm <sup>2</sup>			
Housing colour	grey RAL 7035, black RAL 9005		Temperature range	-25 °C to +50 °C			
Lens	polycarbonate		Protection class	IP 65 / UL type 4/4X/13			
Lens colour	amber, red, clear, blue, green, yellow		Number of optional modules	up to 5			
<b>Light modules</b>	<b>VLL</b>	<b>VLB</b>	<b>VLF</b>	<b>VDC</b>	<b>VDA</b>	<b>VDF</b>	<b>VFF</b>
Light type	steady light	flashing light	strobe light	LED steady light	LED flashing light	LED strobe light	LED multi strobe
Light source	7 W bulb		xenon tube	LED	LED	LED	LED
Socket	BA15d		---	---	---	---	---
Flashing/strobe frequency	---	2 Hz	1,4 Hz	---	---	1,4 Hz	---
Strobe energy	---	---	1 J	---	---	---	---
Light emission	360°						
Leakage	0,003 A						
Nominal current (A)	12 V	max. 5 W	0,110				
	24 V	max. 7 W	0,070	0,029	0,030	max. 0,089	0,082
	110/120 V		0,026	0,033	0,034	0,024	0,032
	230/240 V		0,015	0,036	0,035	0,024	0,034
Life time			~ 10 mio. flashes	100.000 h			
Protection class	IP 65, UL type 4/4X/13						
Weight (g)	55	60	70	70	70	70	70
Weight (Bases)	please refer to general weight list						
<b>Sound modules</b>	<b>VDE</b>			<b>VDZ</b>			
Tone type	continuous and pulsing tone						
Tone frequency	2.800 Hz						
Tone selection	DIP switch			externally switchable			
Max. sound pressure	88/103 dB						
Sound pressure selection	DIP switch			DIP switch			
Sound emission	360°						
Leakage	0,003						
Nominal current (A)	12 V			0,012			
	24 V			0,025			
	110/120 V			0,033			
	230/240 V			0,033			
Protection class	IP 65, UL type 4/4X/13						
Weight (g)	100						

modul **SIGNAL50**

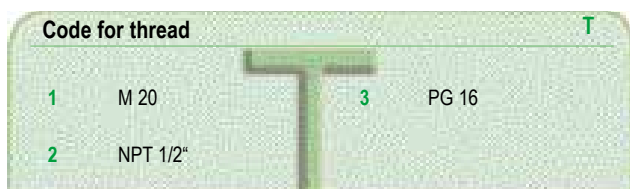


modul **SIGNAL70** modul **SIGNAL50**

**ACCESSORY POLE CONNECTION BOX**

For additional installation possibilities of pole mount assemblies BMR/VMR:

- ▶ 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**

**BDV**

**BDM**



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



## Configurator



BASE for	
modulSIGNAL70	
modulSIGNAL50	



horizontal mounting	
with inside mounting holes	
BMW	900 570 900
VMW	901 570 900



vertical mounting	
single side	
BMV	900 573 900
VMV	901 573 900

MODULES	
<b>STONE</b>	
Piezo buzzer (IP 65)	
Piezo buzzer (IP 54)	
Piezo buzzer (IP 65)	→
Piezo buzzer (IP 54)	
Electronic sounder (IP 54)	
Electronic sounder (IP 54)	

<b>LIGHT-TONE</b>	
Steady light-buzzer (IP 65)	
Steady light-buzzer (IP 65)	
Flashing light-buzzer (IP 65)	→
Xenon flashing light-buzzer (IP 65)	
LED steady light-buzzer (IP 65)	
LED flashing-buzzer (IP 65)	
LED rotating light-buzzer (IP 65)	

<b>LIGHT</b>	
Steady light	
Flashing light	
Xenon strobe light	
LED steady light	→
LED flashing light	
LED rotating light	
LED strobe light	
LED multi strobe light	

<b>AS-INTERFACE</b>	
AS-Interface module (31 Slaves)	
AS-Interface module (62 Slaves)	→
AS-Interface module (62 Slaves)	

### Colour code for lens

C

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

### Length code for tubes

L

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

Specifications	Type	Order No.	Type	Order No.
continuous or pulsing tone	SDE	247 500 VOL	VDE	781 500 VOL
continuous or pulsing tone	SPE	243 500 VOL		
continuous and pulsing tone, externally switchable	SDZ	248 500 VOL	VDZ	782 500 VOL
continuous and pulsing tone, externally switchable	SPZ	244 500 VOL		
1 of 15 tone types selectable	STE	241 500 VOL		
2 of 15 tone types externally switchable	STZ	242 500 VOL		

Specifications	Type	Order No.
continuous or pulsing tone	SLP	250 50C VOL
continuous or pulsing tone; light/tone separately switchable (2 required positions)	SLD	212 50C VOL
continuous or pulsing tone	SBP	260 50C VOL
continuous or pulsing tone	SFP	270 50C VOL
continuous or pulsing tone	SCP	251 50C VOL
continuous or pulsing tone	SAP	261 50C VOL
continuous or pulsing tone	SRP	271 50C VOL

Specifications	Type	Order No.	Type	Order No.
bulb or LED bulb	SLL	210 50C 900	VLL	750 00C 900
bulb or LED bulb	SLB	220 50C VOL	VLB	760 00C VOL
3 J xenon tube	SLF	230 50C VOL	VLF	770 00C VOL
Integrated LEDs	SDC	211 50C VOL	VDC	751 00C VOL
	SDA	221 50C VOL	VDA	761 00C VOL
	SDR	231 50C VOL		
			VDF	771 00C VOL
			VFF	772 00C VOL
Specifications	Type	Order No.	Type	Order No.
up to 4 signal tower modules	BAZ	280 500 510	VAZ	780 500 500
up to 3 signal tower modules	BAZ	280 500 000	VAZ	780 500 600
up to 4 signal tower modules	BAZ	280 000 100	VAZ	750 500 700

	Pole mounting bases	
modulSIGNAL70 modulSIGNAL50	Aluminiumtube with plastic foot	
	BMR	200 70L 900
	VMR	790 54L 900
modulSIGNAL70 modulSIGNAL50	Horizontal mounting with screw	
	BWS	200 73L 900
	VSW	790 57L 900
modulSIGNAL70 modulSIGNAL50	Stainless steel tube with zinc-cast foot	
	BSR	200 73L 900
	VSR	790 57L 900
modulSIGNAL70 modulSIGNAL50	Quick mounting system "Foot Adapter"	
	BFR	200 74L 900
	VFR	790 58L 900

Accessories for pole mount options		
Connection box		
BDW	841 501 900	for horizontal mounting
BDV	841 511 900	for vertical mounting
BDM	841 521 900	for magnetic mounting
Set for vertical mounting (for BWS, VWS)		
BSS	900 700 900	



**NOTE:** Order No apply for black housings, for grey and silver housings see order data.

Voltage code		VOL
404	12 V AC/DC	<b>VOL</b>
405	24 V AC/DC	
310	110/120 V AC	
313	230/240 V AC	







## Order data

Type	Denomination	Light options		Sound options		Order No.		Nominal voltage (V)
		Bulb	LED	Tone types	Sound pressure	Housing grey	Housing black	
<b>Light modules</b>								
SLL	Steady light	GL	LLL, LLB			210 10C 900	210 50C 900	up to 250 V AC/DC
SLB	Flashing light	GL	LLL			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
SLF	Strobe light	3 J xenon tube				230 10C 405	230 50C 405	12-24 V AC/DC
						230 10C 310	230 50C 310	110/120 V AC
						230 10C 313	230 50C 313	230/240 V AC
SDC	LED steady light	integrated LEDs				211 10C 404	211 50C 404	12 V AC/DC
						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
SDA	LED flashing light	integrated LEDs				221 10C 404	221 50C 404	12 V AC/DC
						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	integrated LEDs				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
		integrated LEDs				231 10C 313	231 50C 313	230/240 V AC
<b>Light-sound modules</b>								
SLP	Steady light-buzzer	GL	LLL, LLB	<input type="checkbox"/> conti. <input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 107 dB <input type="checkbox"/> ~ 90 dB	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 2 required positions	GL	LLL, LLB	<input type="checkbox"/> conti. <input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 107 dB <input type="checkbox"/> ~ 90 dB	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	<input type="checkbox"/> conti. <input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 107 dB <input type="checkbox"/> ~ 90 dB	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	3 J xenon tube		<input type="checkbox"/> conti. <input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 107 dB <input type="checkbox"/> ~ 90 dB	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	integrated LEDs		<input type="checkbox"/> conti. <input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 107 dB <input type="checkbox"/> ~ 90 dB	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	integrated LEDs		<input type="checkbox"/> conti. <input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 107 dB <input type="checkbox"/> ~ 90 dB	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	integrated LEDs		<input type="checkbox"/> conti. <input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 107 dB <input type="checkbox"/> ~ 90 dB	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
		integrated LEDs				271 10C 313	271 50C 313	230/240 V AC

Colour code for lens				C
1	amber	5	blue	
2	red	6	green	
4	clear	7	yellow	

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			



## Order data



Type	Denomination	Tone options		Order No.		Nominal voltage (V)
		Tone type	Sound pressure	Housing grey	Housing black	
<b>Sound modules</b>						
SDE	Piezo buzzer, IP 65 tone type and sound pressure selectable via DIP switch	<input type="checkbox"/> conti.	<input type="checkbox"/> ~ 107 dB	247 100 404	247 500 404	12 V AC/DC
		<input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 90 dB	247 100 405	247 500 405	24 V AC/DC
		<input type="checkbox"/> conti.	<input type="checkbox"/> ~ 97 dB	247 100 310	247 500 310	110/120 V AC
		<input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 83 dB	247 100 313	247 500 313	230/240 V AC
SPE	Piezo buzzer, IP 54 tone type and sound pressure selectable via DIP switch	<input type="checkbox"/> conti.	<input type="checkbox"/> ~ 97 dB	243 100 404	243 500 404	12 V AC/DC
		<input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 90 dB	243 100 405	243 500 405	24 V AC/DC
		<input type="checkbox"/> conti.	<input type="checkbox"/> ~ 83 dB	243 100 310	243 500 310	110/120 V AC
		<input type="checkbox"/> pulsing	<input type="checkbox"/> ~ 77 dB	243 100 313	243 500 313	230/240 V AC
SDZ	Piezo buzzer, IP 65 tone type and sound pressure selectable via DIP switch 2 required positions	continuous and pulsing	<input type="checkbox"/> ~ 107 dB	248 100 404	248 500 404	12 V AC/DC
			<input type="checkbox"/> ~ 90 dB	248 100 405	248 500 405	24 V AC/DC
			<input type="checkbox"/> ~ 97 dB	248 100 310	248 500 310	110/120 V AC
			<input type="checkbox"/> ~ 83 dB	248 100 313	248 500 313	230/240 V AC
SPZ	Piezo buzzer, IP 54 tone type externally switchable sound pressure adjustable via DIP switch 2 required positions	continuous and pulsing	<input type="checkbox"/> ~ 97 dB	244 100 404	244 500 404	12 V AC/DC
			<input type="checkbox"/> ~ 90 dB	244 100 405	244 500 405	24 V AC/DC
			<input type="checkbox"/> ~ 83 dB	244 100 310	244 500 310	110/120 V AC
			<input type="checkbox"/> ~ 77 dB	244 100 313	244 500 313	230/240 V AC
<b>Electronic sounder modules</b>						
STE	Electronic sounder, IP 54 tone type selectable via DIP switch, upper/lower frequency and speed infinitely variable	15 tone types see sound table	64-103 dB	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	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
<b>Bases</b>						
BMW	Base for horizontal mounting, M20			200 100 900	200 500 900	
BNW	Base for horizontal mounting, NPT 1/2"			200 130 900	200 530 900	
BPW	Base for horizontal mounting, PG16			200 120 900	200 520 900	
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					



## Accessories

**NOTE:** Light sources have to be ordered separately (please refer to order data accessories)

Type	Denomination	Nominal voltage (V)	Order No.
GL01	Incandescent bulb	12 V, 5 W	890 010 904
GL02		24 V, 6,5 W	890 010 905
GL03		48 V, 5 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, 6 W	890 010 913
<b>LED Bulb BA15d</b>			
LLL	LED steady light	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
LLB	LED flashing light	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



## Order data

Type	Denomination	Light options		Order No.	Nominal voltage (V)	
		Bulb	LED			
<b>Light modules</b>						
VLL	Steady light	GL	LLL, LLB	750 00C 900	up to 250 V AC/DC	
VLB	Flashing light	GL	LLL	760 00C 405	12-24 V AC/DC	
				760 00C 310	110/120 V AC	
				760 00C 313	230/240 V AC	
VDC	LED steady light	integrated LEDs		751 00C 405	24 V AC/DC	
				751 00C 310	110/120 V AC	
				751 00C 313	230/240 V AC/DC	
VDA	LED flashing light	integrated LEDs		761 00C 405	24 V AC/DC	
				761 00C 310	110/120 V AC	
				761 00C 313	230/240 V AC/DC	
VDF	LED strobe light	integrated LEDs		771 00C 405	24 V AC/DC	
				771 00C 310	110/120 V AC	
				771 00C 313	230/240 V AC/DC	
VFF	LED multi strobe light	integrated LEDs		772 00C 405	24 V AC/DC	
				772 00C 310	110/120 V AC	
				772 00C 303	230/240 V AC/DC	
VLF	Xenon strobe light	1 J xenon tube		770 00C 405	12-24 V AC/DC	
				770 00C 310	110/120 V AC	
				770 00C 313	230/240 V AC	
<b>Sound modules</b>						
		Tone options		Housing grey	Housing black	
		Tone types	Sound pressure			
VDE	Piezo buzzer, IP 65 tone type and sound pressure selectable via DIP switch	<input type="checkbox"/> continuous	<input type="checkbox"/> 103 dB	781 100 404	781 500 404	
		<input type="checkbox"/> pulsing	<input type="checkbox"/> 88 dB	781 100 405	781 500 405	
				781 100 310	781 500 310	
				781 100 313	781 500 313	
VDZ	Piezo buzzer, IP 65; tone type extern. switch.; sound pressure selectable via DIP switch; 2 required positions	<input type="checkbox"/> continuous and pulsing	<input type="checkbox"/> 103 dB	782 100 404	782 500 404	
			<input type="checkbox"/> 88 dB	782 100 405	782 500 405	
				782 100 310	782 500 310	
				782 100 313	782 500 313	
<b>Bases</b>						
				Housing grey	Housing black	
				Weight (g)		
VMW	Base for horizontal mounting, M20			790 120 900	790 520 900	45
VNW	Base for horizontal mounting, NPT 1/2"			790 130 900	790 530 900	
VPW	Base for horizontal mounting, PG16			790 110 900	790 510 900	
VMV	Base for vertical mounting			790 140 900	790 540 900	85
VMR	Pole mount base on aluminium tube with plastic foot			790 14L 900	790 54L 900	55-245
VSR	Pole mount base on stainl. steel tube with zinc die-cast foot, powder coated			790 15L 900	790 55L 900	205-955
VSW	Pole mount base for horizontal mounting with screw			790 17L 900	790 57L 900	
BSS	Set for vertical mounting (for VSW)			200 400 900	200 800 900	
VFR	Pole mount base on aluminium tube with foot adapter for quick mounting			790 18L 900	790 58L 900	
Cap is automatically included with each base						



**NOTE:**  
Light sources have to be ordered separately (please refer to order data accessories).

Colour code for lens				C
1	amber	5	blue	
2	red	6	green	
4	clear	7	yellow	

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



## Accessories

modul **SIGNAL50**

Type	Denomination	Nominal voltage (V)	Order No.
GL01	Incandescent bulb	12 V, 5 W	890 010 904
GL02		24 V, 6,5W	890 010 905
GL03		48 V, 5 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, 6 W	890 010 913
<b>LED bulb BA15d</b>			<b>Steady light</b>
LLL	LED steady light	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
			<b>Flashing light</b>
LLB	LED flashing light	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

### ACCESSORY SAFETY SCREWS

- Additional safety device for modules against unauthorized opening; optionally available

Type	Denomination	Order No.
SIC	Safety screw set	700 000 900



## AS-INTERFACE

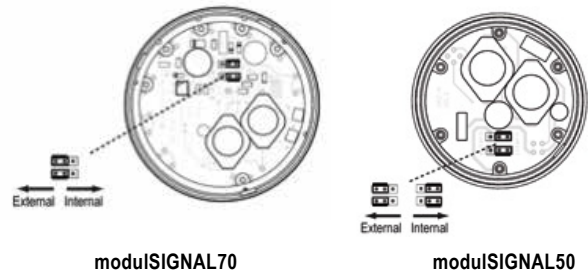
The integration of the modulSIGNAL70/ modulSIGNAL50 signal tower into AS-Interface field bus systems is easily possible with the new AS-Interface module type BAZ/VAZ. It is optionally available with standard-slave or the new A/B technique.

The AS-Interface module with standard slave can address up to 31 modules and maximum 4 modules on the signal tower. The option with A/B technique is able to address up to 62 modules and 3 or 4 modules on the signal tower.

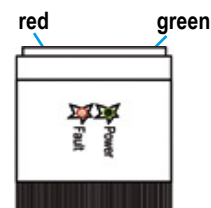
When using internal power supply from the bus system maximum 0,200 A are available for the signal tower elements.



## Selection of module powering



## Status indication



## Features

- LED status indicator - check routine
- Modules for 31 or 62 addresses
- Available with standard or A/B technique
- Internal (via bus system) or external power supply selectable
- Easy integration of signal tower as actor into the actor-sensor-interface system. BAZ/VAZ-module is mounted as first module directly onto the signal tower base
- Significantly reduced wiring work

green	red	Status
●	○	Normal operation
●	⊙	No data exchange
★	⊙	No data exchange, Slave address = 0
★	★	Peripheral fault, overcurrent or low voltage on the output



## Technical data



Type	BAZ - modulSIGNAL70			VAZ - modulSIGNAL50		
	280 500 510	280 500 000	280 500 100	780 500 500	780 500 600	780 500 600
Order no.	280 500 510	280 500 000	280 500 100	780 500 500	780 500 600	780 500 600
Number of slaves	31	62	62	31	62	62
Number of modules	4	3	4	4	3	4
IO-Code	8	7	7	8	7	7
ID-Code	F	A	A	F	A	A
ID2-Code		E	7		E	7
Data bits	D0...Module 0			D0...Module 0		
	D1...Module 1			D1...Module 1		
	D2...Module 2			D2...Module 2		
	D3...Module 3			D3...Module 3		
Current from AS-Interface line	max. 0,250 A			max. 0,180 A		
Temperature range	-20° to +50° C			-20° to +50° C		
Protection class	IP 65			IP 65		
AS-Interf. voltage range	26,5-31,6 V			26,5-31,6 V		
Module power from the AS-Interface line	max. 0,200 A			max. 0,130 A		
External power supply	PELV, 24 V DC +/- 10%, max. 0,300 A per module			PELV, 24 V DC +/- 10%, max. 0,300 A per module		
Housing, colour	polycarbonate, black RAL 9005			polycarbonate, black RAL 9005		



## Order data



Type	Denomination	Order no.
BAZ	AS-Interf. module for 31 slaves - up to 4 signal tower mod.	280 500 510
	AS-Interf. module for 62 slaves - up to 3 signal tower mod.	280 500 000
	AS-Interf. module for 62 slaves - up to 4 signal tower mod.	280 500 100

Type	Denomination	Order no.
VAZ	AS-Interf. module for 31 slaves - up to 4 signal tower mod.	780 500 500
	AS-Interf. module for 62 slaves - up to 3 signal tower mod.	780 500 600
	AS-Interf. module for 62 slaves - up to 4 signal tower mod.	780 500 700

## QUICK MOUNT SYSTEM „FOOT ADAPTER“

(Pat.No. 501053)



### Function

- ▶ The signal tower with pole mount base on aluminium tube with foot adapter for quick base mounting (BFR/VFR) 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