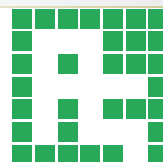


# Signal Tower Ø 54 mm

## BR 50


**AUTROSAFE OY**

 Puh. (09) 2709 0120  
 www.autrosafe.fi

**IP 54**

Protection system

**IP 65**

Option

**UL**
**+ 50 °C**  
**- 25 °C**

Operating temperature

- modular design with sturdy housing for all indoor and outdoor applications in tough conditions
- wherever machine status needs to be displayed and warning signals given
- high protection system IP 54 (optionally IP 65)
- flexible building kit system guarantees easy handling
- up to 5 modules with 6 lens colours can be combined as desired by simply plugging together, even retrospectively
- mechanical and electronic components are uncoupled, resulting in a more stable structure that is less sensitive to vibration
- many different variations are possible, can be fixed by means of tubular stand, tube or direct mounting
- made of environmentally-friendly materials as per DIN ISO 14000
- monitored module for greater safety; the light bulb has two separate LED strands. If one strand fails, the alarm contact is activated and the second strand continues to light

Technical data		BR 50 (standard modules)					
Modules		continuous light		blinking light 1.5 Hz		flashing light	sounder
Colours		clear, yellow, amber, red, green, blue					
Segment stages (total)		max. 5 (order and colour can be selected individually)					
Dispersion		360°					
Light source <sup>1</sup>		bulb BA15d	LED	bulb BA15d	LED		
Rated power	per stage	7 W	depending on voltage	7 W	depending on voltage		
	per stage if 5 stages	5 W		5 W			
Flash energy	230 V / 115 V AC					0.6 J	
	24 V AC/DC					24 V: 1 J	
Flash frequency						approx. 1 Hz	
Sound pressure level							85 dB (A)
Alarm tones							7
Nominal current consumption (50/60 Hz)	230 V AC	35 mA	15 mA	35 mA	–	10.5 mA	15 mA
	115 V AC	64 mA	15 mA	–	–	20 mA	15 mA
operating range		- 15% ... + 10%				- 10% ... + 15%	- 15% ... + 10%
Nominal current consumption	24 V	DC: 300 mA	DC: 30 mA	DC: 250 mA	DC: 30 mA	AC/DC: 100 mA	12 mA
	operating range	- 15% ... + 20%		10 V – 30 V		AC: 10 V – 27 V DC: 10 V – 35 V	- 15% ... + 20%
Operating temperature	with bulb	- 25 °C ... + 50 °C		- 25 °C ... + 50 °C			- 10 °C ... + 45 °C
	with LED	- 30 °C ... + 60 °C					
Relative humidity		90%					
Protection system according to EN 60529		IP 54					IP 43
Duty cycle		100%					
Service life of light source		approx. 1,500 h	approx. 50,000 h	approx. 1,500 h	approx. 50,000 h	light emission still 70% after 8,000,000 flashes	
Material	base	acrylonitrile butadiene styrene (ABS)					
	lens	polycarbonate (PC)					
	tube	stainless steel					
Tube thread		30 mm, M16 x 1,5					
Mounting		vertical or horizontal					
Mounting information		the sounder module or the monitored module is always the uppermost module; a maximum of 1 monitored module may be used per signal tower					
Weight	module	80 g		90 g		90 g	230 g
	base	mounting stand: approx. 220 g / tube mounting: approx. 200 g / direct mounting: approx. 180 g					

<sup>1</sup> please order light source separately

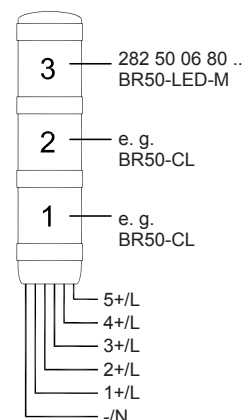
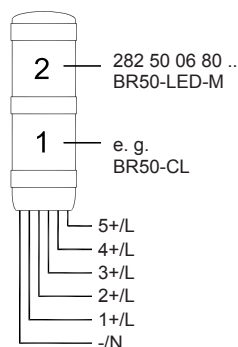
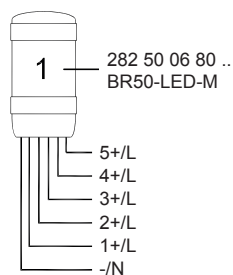
Technical data	monitored continuous light module	BR 50 AS-i Bus slave	
Modules		AS-i	AS-i-AB
Module types	monitored continuous light	LED module, sounder module, continuous light module, blinking light module	
Colours	yellow, red		
Segment stages (total)	max. 3	max. 4	max. 3
Dispersion	360°		
Light source	2 x 8 LED (not exchangeable)		
AS-i profile		S-8.F.E	S-8.A.E
AS-i specification		AS-i 3.0 / EN 50295	
Programming		DC-Jack, Ø 1.3 mm	
max. slave/master		31	62
Alarm output	max. 230 V / 80 mA, $R_{ONmax} = 35 \Omega$ (closed at error-free operation)		
Rated power	24 V DC		
Nominal current consumption	approx. 35 mA	< 0,25 A	
Operating range	- 15% ... + 20%	26.5 V – 31.6 V	
Operating temperature	- 30 °C ... + 60 °C		
Relative humidity	90%		
Protection system according to EN 60529	IP 54		
Duty cycle	100%		
Service life of light source	50,000 hrs @ 24 °C, 40% R.H.		
Material	base: acrylonitrile butadiene styrene (ABS) lens: polycarbonate (PC)		
Mounting	vertical or horizontal		
Mounting information	the AS-i / AS-i-AB module is always used as the lowest module		
Weight	90 g	90 g	

## Connection and configuration options for monitored modules

- Use of one monitored module per signal tower:
  - configuration as „top“ module (top module is monitored)
  - configuration as „bottom“ module (bottom module is monitored)
- Use of 2 monitored modules per signal tower

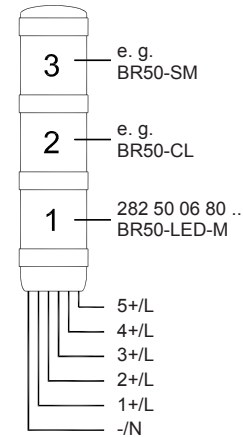
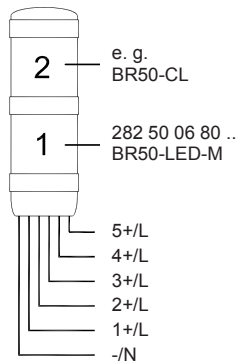
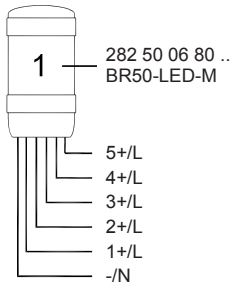
### Configuration as „top“ module (top module is monitored)

Base module + 1 <sup>st</sup> stage monitored		Base module + 1 <sup>st</sup> stage not monitored, 2 <sup>nd</sup> stage monitored		Base module + 1 <sup>st</sup> /2 <sup>nd</sup> stage not monitored, 3 <sup>rd</sup> stage monitored	
-/N	supply voltage (-), common connection for all stages	-/N	supply voltage (-), common connection for all stages	-/N	supply voltage (-), common connection for all stages
1+/L	supply voltage (+), activation of monitored module	1+/L	supply voltage (+), activation of 1 <sup>st</sup> stage	1+/L	supply voltage (+), activation of 1 <sup>st</sup> stage
2+/L	potential-free alarm output contact 1	2+/L	supply voltage (+), activation of 2 <sup>nd</sup> stage (monitored)	2+/L	supply voltage (+), activation of 2 <sup>nd</sup> stage
3+/L	potential-free alarm output contact 2	3+/L	potential-free alarm output contact 1	3+/L	supply voltage (+), activation of 3 <sup>rd</sup> stage (monitored)
4+/L	n.c.	4+/L	potential-free alarm output contact 2	4+/L	potential-free alarm output contact 1
5+/L	n.c.	5+/L	n.c.	5+/L	potential-free alarm output contact 2



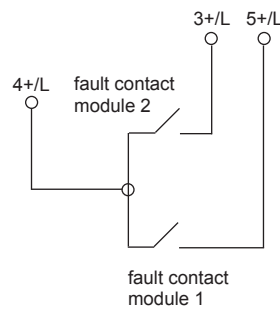
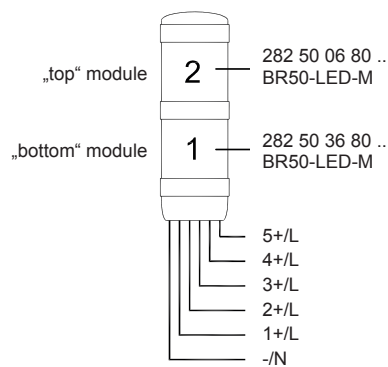
## Configuration as „bottom“ module (bottom module is monitored)

Base module + 1 <sup>st</sup> stage monitored		Base module + 1 <sup>st</sup> stage monitored, 2 <sup>nd</sup> stage not monitored		Base module + 1 <sup>st</sup> stage monitored, 2 <sup>nd</sup> /3 <sup>rd</sup> stage not monitored	
-/N	supply voltage (-), common connection for all stages	-/N	supply voltage (-), common connection for all stages	-/N	supply voltage (-), common connection for all stages
1+/L	supply voltage (+), activation of monitored module	1+/L	supply voltage (+), activation of 1 <sup>st</sup> stage (monitored)	1+/L	supply voltage (+), activation of 1 <sup>st</sup> stage (monitored)
2+/L	n.c.	2+/L	supply voltage (+), activation of 2 <sup>nd</sup> stage	2+/L	supply voltage (+), activation of 2 <sup>nd</sup> stage
3+/L	n.c.	3+/L	n.c.	3+/L	supply voltage (+), activation of 3 <sup>rd</sup> stage
4+/L	potential-free alarm output contact 1	4+/L	potential-free alarm output contact 1	4+/L	potential-free alarm output contact 1
5+/L	potential-free alarm output contact 2	5+/L	potential-free alarm output contact 2	5+/L	potential-free alarm output contact 2



## Use of 2 monitored modules per signal tower

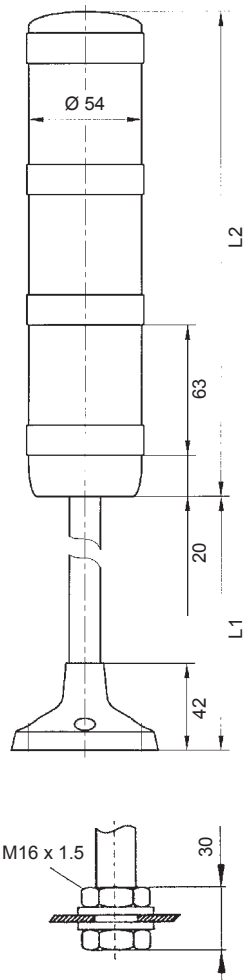
Base module + 1 <sup>st</sup> /2 <sup>nd</sup> stage monitored	
-/N	supply voltage (-), common connection for all stages
1+/L	supply voltage (+), activation of 1 <sup>st</sup> stage (monitored)
2+/L	supply voltage (+), activation of 2 <sup>nd</sup> stage (monitored)
3+/L	alarm output module 2
4+/L	common connection alarm outputs
5+/L	alarm output module 1



The alarm outputs of both levels have a shared contact!

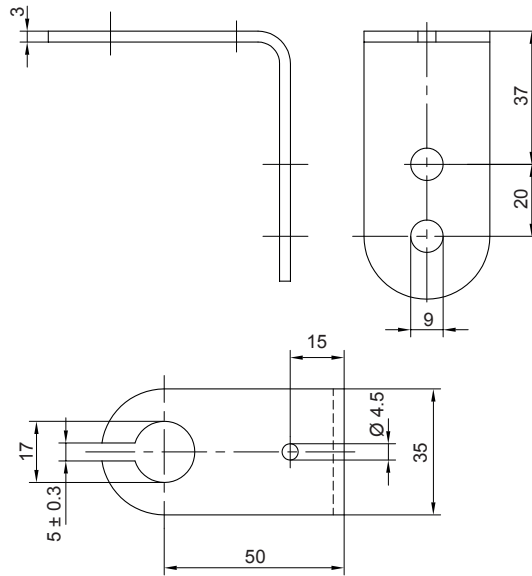
**Caution:** Max. 2 modules can be utilized

## Dimensions

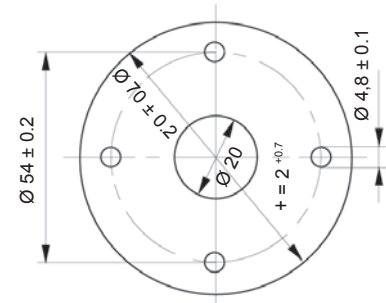


	L1 tube mounting	L1 mounting stand
Tube length 100	78	88
Tube length 250	228	238
Tube length 400	378	388
	L2	
1-stage	107	
2-stage	170	
3-stage	233	
4-stage	296	
5-stage	359	

Mounting bracket



Stand mounting gasket



Bayonet connection allows fast, simple and safe mounting



Base and end module

Light module clear

Light module yellow

Light module amber

Light module red

Light module green

Light module blue

AS-i module

Sounder module

## Configuration alternatives

**Stage 5**

Sounder module

**Stage 4**

Flashing light module

**Stage 3**

Continuous light module with LED

**Stage 2**

Blinking light module

Monitored module

**Stage 1**

Continuous light module

AS-i-module

**Mounting variants**

Ordering details					
Article numbers			BR 50 modules		
Version	Rated voltage		230 V AC	115 V AC	24 V DC
Base and end module		BR50-BC	282 50 01 0 000		
Continuous light module	clear	BR50-CL-CL	282 50 04 0 010		
	yellow	BR50-CL-YE	282 50 04 0 030		
	amber	BR50-CL-AM	282 50 04 0 040		
	red	BR50-CL-RE	282 50 04 0 050		
	green	BR50-CL-GR	282 50 04 0 060		
	blue	BR50-CL-BL	282 50 04 0 070		
Blinking light module	clear	BR50-BL-CL	282 50 05 1 010	282 50 05 1 610	282 50 05 8 010
	yellow	BR50-BL-YE	282 50 05 1 030	282 50 05 1 630	282 50 05 8 030
	amber	BR50-BL-AM	282 50 05 1 040	282 50 05 1 640	282 50 05 8 040
	red	BR50-BL-RE	282 50 05 1 050	282 50 05 1 650	282 50 05 8 050
	green	BR50-BL-GR	282 50 05 1 060	282 50 05 1 660	282 50 05 8 060
	blue	BR50-BL-BL	282 50 05 1 070	282 50 05 1 670	282 50 05 8 070
Flashing light module	clear	BR50-FL-CL	282 50 07 1 010	282 50 07 1 610	282 50 07 8 010
	yellow	BR50-FL-YE	282 50 07 1 030	282 50 07 1 630	282 50 07 8 030
	amber	BR50-FL-AM	282 50 07 1 040	282 50 07 1 640	282 50 07 8 040
	red	BR50-FL-RE	282 50 07 1 050	282 50 07 1 650	282 50 07 8 050
	green	BR50-FL-GR	282 50 07 1 060	282 50 07 1 660	282 50 07 8 060
	blue	BR50-FL-BL	282 50 07 1 070	282 50 07 1 670	282 50 07 8 070
LED module, monitored (top module)	yellow	BR50-LED-M-YE	–	–	282 50 06 8 030
	red	BR50-LED-M-RE	–	–	282 50 06 8 050
LED module, monitored (bottom module)	yellow	BR50-LED-M-YE	–	–	282 50 36 8 030
	red	BR50-LED-M-RE	–	–	282 50 36 8 050
Sounder module		BR50-SM	282 50 08 1 000	282 50 08 1 600	282 50 08 8 000
AS-i module		BR50-AS-i	282 50 14 8 300		
AS-i-AB module		BR50-AS-i-AB	282 50 17 8 300		
Information module		BR50-IM	282 50 27 0 000		
Tubular stand with plinth	100 mm	BR50-S100	282 50 15 0 010		
	250 mm	BR50-S250	282 50 15 0 020		
	400 mm	BR50-S400	282 50 15 0 040		
Tube with thread and bracket (excl. seal and cable)	100 mm	BR50-T100	282 50 16 0 010		
	250 mm	BR50-T250	282 50 16 0 020		
	400 mm	BR50-T400	282 50 16 0 040		

Light bulbs for constant light and blinking light modules must be ordered separately

### Options / Accessories



Article number:  
282 50 25 0 000



for mounting stand

Article number:  
282 50 20 0 000



for direct mounting

Article number:  
282 50 21 0 000



Article number:  
282 50 22 0 000  
282 50 23 0 000



Light source



UL LISTED



GOST

See pages 190/191 for further information

## Ordering example

Signal tower 5-stage, IP 65	Article numbers		
	Version	230 V AC	24 V DC
 <p>Sounder module</p>	<b>BR50-SM</b>	282 50 08 1 000	282 50 08 8 000
+			
 <p>Flashing light module</p>	<b>BR50-MG</b>	282 50 22 0 000	
	+		
	<b>BR50-FL</b>	282 50 07 1 050	282 50 07 8 050
+			
 <p>Continuous light module with bulb or LED</p>	<b>BR50-MG</b>	282 50 22 0 000	
	+		
	<b>BR50-CL</b>	282 50 04 0 060	
	+		
	bulb	282 13 00 0 004	282 13 00 0 000
	or		
	<b>LED BA 15d</b>	282 13 00 0 018	282 13 00 0 011
+			
 <p>Blinking light module with bulb or LED</p>	<b>BR50-MG</b>	282 50 22 0 000	
	+		
	<b>BR50-BL</b>	282 50 05 1 030	282 50 05 8 030
	+		
	bulb	282 13 00 0 004	282 13 00 0 000
	or		
	<b>LED BA 15d</b>	282 13 00 0 030	282 13 00 0 007
+			
 <p>Continuous light module with bulb or LED</p>	<b>BR50-MG</b>	282 50 22 0 000	
	+		
	<b>BR50-CL</b>	282 50 04 0 010	
	+		
	bulb	282 13 00 0 004	282 13 00 0 000
	or		
	<b>LED BA 15d</b>	282 13 00 0 014	282 13 00 0 006
	+		
	<b>BR50-MG</b>	282 50 22 0 000	
	+		
	<b>BR50-BC</b>	282 50 01 0 000	
+			
 <p>Mounting stand (100 mm) and seal</p>	<b>BR50-TG</b>	282 50 23 0 000	
	<b>BR50-S100</b>	282 50 15 0 010	