Signal tower ∅ 54 mm
BR 50

- 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

IP 54	IP 65	UL	+ 50 °C - 25 °C
Protection system	Option		Operating temperature

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 [1]		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					

[1] 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 Ω (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

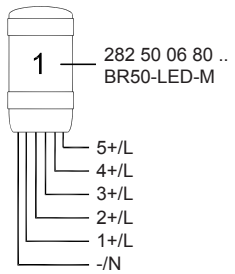
- Use of one monitored module per signal tower:
  - configuration as „top“ module (top module is monitored)
  - configuration as „bottom“ module (bottom module is monitored)
- Use of 2 monitored modules per signal tower

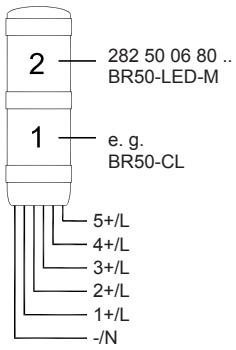
Configuration as „top“ module (top module is monitored)

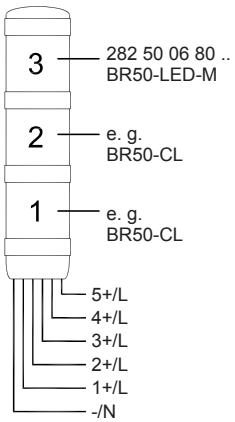
Base module + 1st stage monitored	
-/N	supply voltage (-), common connection for all stages
1+/L	supply voltage (+), activation of monitored module
2+/L	potential-free alarm output contact 1
3+/L	potential-free alarm output contact 2
4+/L	n.c.
5+/L	n.c.

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

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





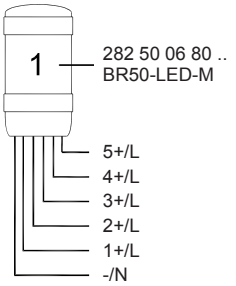


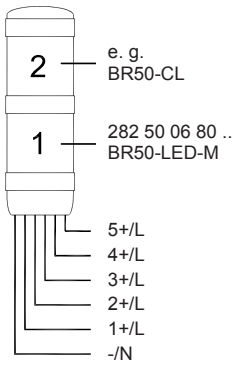
Configuration as „bottom“ module (bottom module is monitored)

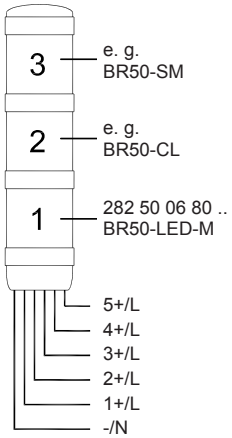
Base module + 1st stage monitored	
-/N	supply voltage (-), common connection for all stages
1+/L	supply voltage (+), activation of monitored module
2+/L	n.c.
3+/L	n.c.
4+/L	potential-free alarm output contact 1
5+/L	potential-free alarm output contact 2

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

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

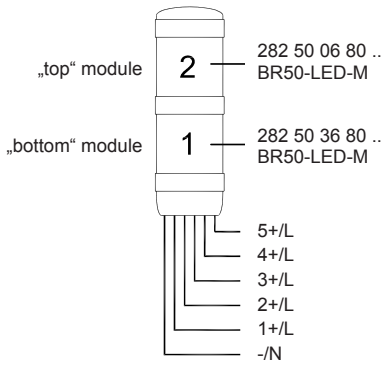


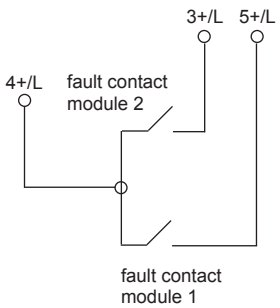




Use of 2 monitored modules per signal tower

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

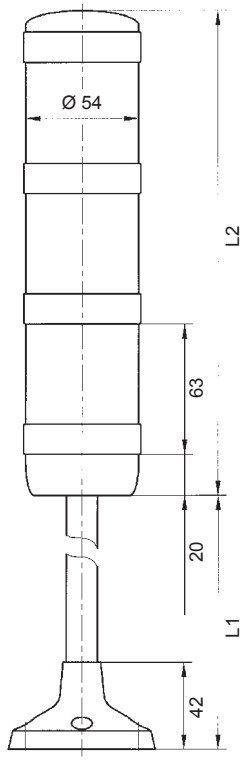


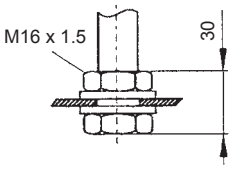


The alarm outputs of both levels have a shared contact!

Caution: Max. 2 modules can be utilized

Dimensions

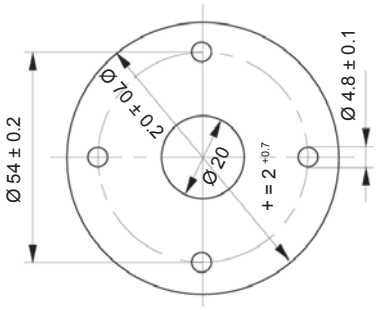




	L1 tube mounting	L1 mounting stand
Tube length 100	78	88
Tube length 250	228	238
Tube length 400	378	388

	L2
1-stage	107
2-stage	170
3-stage	233
4-stage	296
5-stage	359

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

Sounder module

Stage 5

Flashing light module

Stage 4

Continuous light module with LED

Stage 3

Blinking light module

Monitored module

Stage 2

Continuous light module

AS-i-module

Stage 1

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

Lamp remover
Article number:
282 50 25 0 000

Wall bracket for mounting stand
Article number:
282 50 20 0 000

Mounting kit for direct mounting
Article number:
282 50 21 0 000

Gaskets IP 65
Article number:
282 50 22 0 000
282 50 23 0 000

Light source

c UL us LISTED

GOST

See pages 188/189 for further information

Ordering example

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