

# SIGNAL TOWERS

## BR 50-LED 3G/3D



BR 50 for Ex applications in the categories 3G and 3D for zones 2 and 22.

- Extremely long service life (>50,000 hrs).
- The light is amplified by the internal prisms of the impact-proof, heat-resistant and dustproof polycarbonate lens and can be easily recognised from all sides.
- The technically and economically optimum solution for every application.



protection system



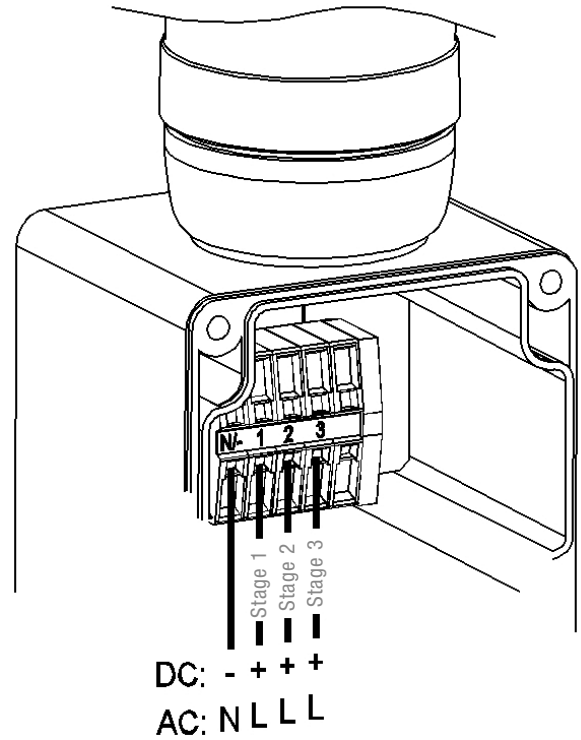
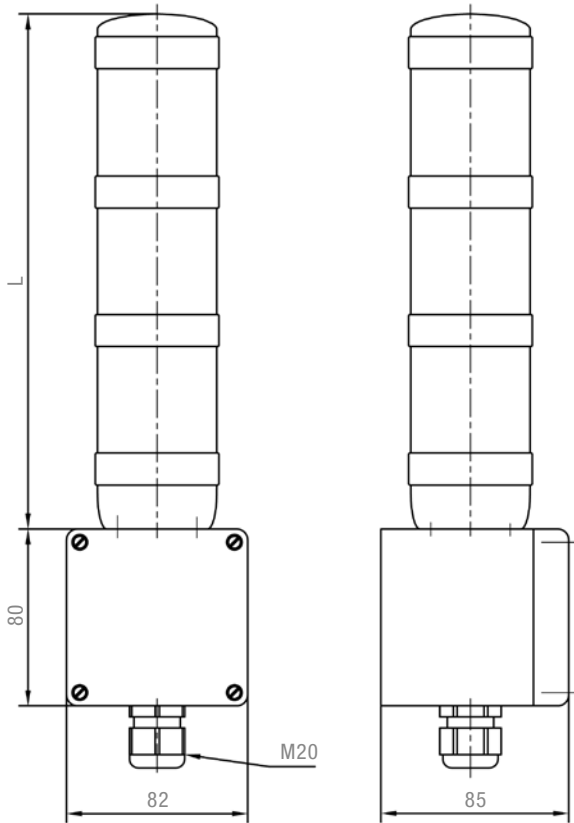
operating temperature



PRODUCT		BR 50-LED 3G/3D			
Version		1-stage	2-stage		3-stage
Colour order		●	● ●	● ●	● ● ●
Nominal current consumption	230 V AC 50   60 Hz	9 mA	16 mA	16 mA	24 mA
	24 V AC 50   60 Hz	60 mA	90 mA	80 mA	130 mA
	24 V DC	50 mA	80 mA	70 mA	120 mA
Operating range	230 V AC 50   60 Hz	195–253 V			
	24 V AC 50   60 Hz	18–28 V			
	24 V DC	18–28 V			
Explosion protection		II 3G Ex nA II T5 X –20 °C ≤ Ta ≤ +50 °C II 3D tDA22 IP65 T85°C X –20 °C ≤ Ta ≤ +50 °C			
Category (area of use)		3G (Zone 2), 3D (Zone 22)			
Testing body		Pfannenberg			
Temperature class T		T5			
Special conditions		X: according to the requirements of prDIN EN 60 079-0, DIN EN 61241-0 (2007) and DIN EN 61241-1 (2005), the equipment is suitable for applications with a low degree of mechanical danger. It must therefore be ensured that the light is mounted with sufficient protection against impacts. A protective cage is not mandatory.			
Operating mode		continuous light			
Light source		LED			
Operating temperature		–20 °C ... +50 °C			
Storage temperature		–40 °C ... +70 °C			
Relative humidity		90 %			
Protection system (EN 60529)		IP 65			
Duty cycle		100 %			
Service life of the light source		>50,000 hrs			
Material	lens	● ● ● ● ● ● polycarbonate (PC)			
	housing	acrylonitrile butadiene styrene (ABS)			
	connector housing	polycarbonate (PC), light grey RAL 7035			
Mounting		arbitrary			
Connecting terminals		cage clamp terminal 0.08–2.5 mm <sup>2</sup>			
Cable entry		M20 bottom side			

**DIMENSIONS**

**CONNECTION DIAGRAM**



	<b>L</b>
1-stage	107
2-stage	170
3-stage	233

Mounting holes H 50 mm x W 70 mm Ø 4.2

ARTICLE NO.	BR 50-LED 3G/3D	
Version	230 V AC	24 V AC/DC
1-stage <span style="color:red">●</span>	22093101000	22093401000
1-stage <span style="color:green">●</span>		22093401106
2-stage <span style="color:red">●</span> <span style="color:green">●</span>	22093102300	22093402300
2-stage <span style="color:yellow">●</span> <span style="color:green">●</span>	22093102301	22093402301
3-stage <span style="color:red">●</span> <span style="color:yellow">●</span> <span style="color:green">●</span>	22093103000	22093403000

**MANUFACTURER'S DECLARATION**

We hereby declare that the explosion-protected means of alarm with the type designation **BR 50-LED 3G/3D** has been developed and manufactured in accordance with the requirements as per EN 60079-0.

**This declaration is based on compliance with the following regulations and standards:**  
 DIN EN 60079-15 Electrical equipment for areas at risk of explosions – type of protection type “n”  
 DIN EN 50281-1-1 Electrical equipment for use in areas with combustible dust

The BR 50-LED 3G/3D signal towers are approved for use in potentially explosive areas in Zones 2 and 22 as per 94/9/EU.