LED MULTI-FUNCTION LIGHT
PMF LED-HI-SIL



Multifunction light with most modern and ultra-bright LED technology

- the warning devices can be implemented in Safety Instrumented Systems (SIS) up to **SIL 2/PL d**
- to signal dangerous situations in safety-related application such as **process and plant safety**, e.g. leaks / gas warning / high-pressure / overfilling and **machine safety**, e.g. start-up warning / muting indication / machine stop delay warning
- with 315 cd flash brightness for large areas and outdoors
- highly insensitive to vibration with service life exceeding 50,000 hrs
- 3 different signaling modi selectable:
  – blinking light, highly efficient for permanent warning
  – flashing light, brighter than comparable xenon flashing light
  – rotating beacon effect, without susceptible mechanics
- extremely low power consumption
- as standard with inrush current limitation and flexible wide range power supplies
- automatic brightness adjustment to ambient light (day / night switching) can be activated to prevent glare
- up to 2 out of 4 quadrants can be switched off, energy-saving and for directional signaling

SIL 2/PL d: All safety technical key data can be found in the manual

IP 55 protection system

+55 °C / –40 °C operating temperature

Ultra bright

day / night

Inrush current limitation

PRODUCT		PMF LED-HI-SIL		
DATA				
Rated voltage		12 / 24 V DC		
Operating range		10 - 30 V DC		
Current consumption	flash 1 Hz	300 mA		
	diagnostics channel	35 mA		
Alarm contact	contact version	positively driven contact (1 x NC, 1 x NO)		
	switching version	max. 3 A		
	switching voltage	max. 250 V AC		
	max. switching power	750 VA AC		
	recommended min. load	>50 mW		
Operating mode		Blink	flashing light	rotating mirror effect
Flash rate of the main flash		1.5 Hz	1 Hz	2.5 Hz (150 rpm)
Light source		8 x 2 high performance LEDs		
Light intensity (DIN 5037) [1]		315 cd, automatically reducible (day / night operation)		
Max. viewing distance		411 m		
Beam angle		vertical ca. 12°, horizontal 360°		
Operating temperature		–40... +55 °C		
Storage temperature		–40... +70 °C		
Relative humidity		90 %		
Protection system (EN 60529)		IP 55 (vertical mounting)		
Service life of the light source		>50,000 h		
Material	housing	⁄ ● ● ● ● polycarbonate (PC), fresnel characteristic		
	lens	bracket mounting: polycarbonate (PC) / direct mounting: acrylonitrile butadiene styrene (ABS)		
Cable entry		M20 x 1,5		
Connecting terminal		cage clamp 0.2 – 2.5mm²		
Weight		direct mounting: 660g / bracket mounting: 940g		

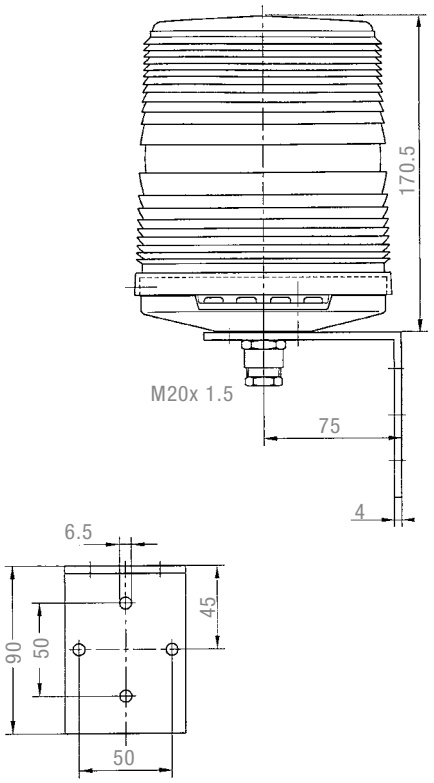
[1] with a clear lens

ARTICLE-NR.	PMF LED-HI-SIL direct mounting	PMF LED-HI-SIL bracket mounting
LENS COLOUR	12 / 24 V	12 / 24 V
	21154634006	21154634007
	21154635006	21154635007

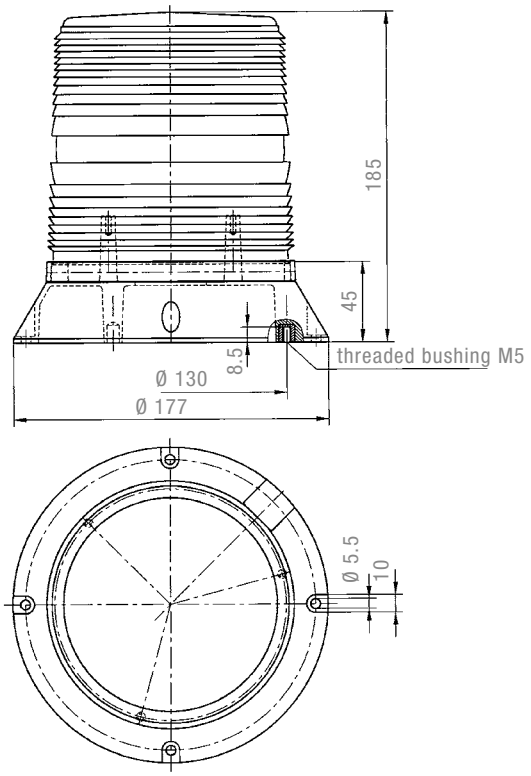
Article numbers for other colours on request.

DIMENSIONS

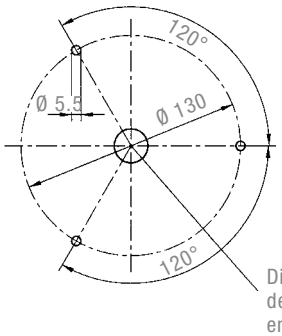
bracket mounting



direct mounting

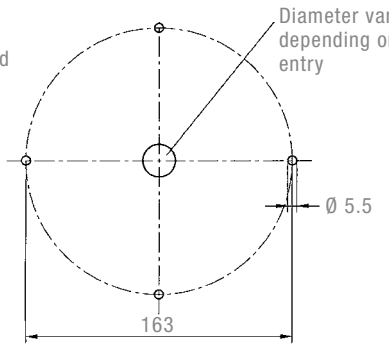


Drilling template 1 for M5 threaded bushing

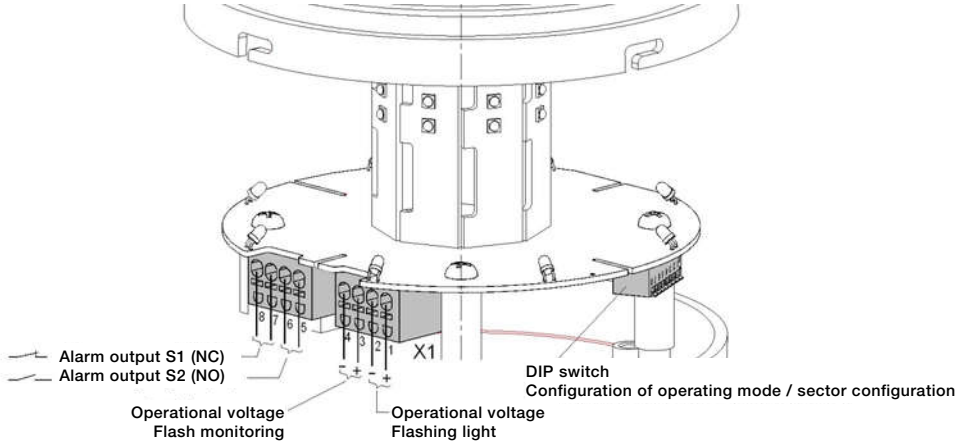


Two different drilling templates are available for fixing the light (direct mounting). M5x 8 threaded bushes are set into the base of the light for fixing according to drilling template 1. Drilling template 2 allows the light to be fixed using 4 through bolts or similar from above.

Drilling template 2



CONNECTION DIAGRAM



CONFORMITY TO STANDARDS

The visual characteristics of LED lights conform to the European standard DIN EN 842; **“Machine safety – visual alarm signals”.**
Requirements contained in the DIN EN 981 standard; **“Machine safety – system of acoustic and visual alarm and information signals”,** can be fulfilled.

The colours “red” for the emergency signal and “yellow” for the warning signal conform to the requirements of IEC 73 / DIN EN 60073 / VDE 0199; **“Coding of display devices and control elements using colours and supplementary means”.**

References to visual alarm devices can be found in the following standards:

EN 60825-1	Radiation safety of laser devices, identical to IEC 825 and DIN-VDE 0837
DIN EN 54	Fire alarm systems
DIN 54113-2	Radiation protection regulations for the technical operation of X-ray equipment up to 500 kV