

All-round flashing lights 14 Joules

PMF 2020 / PMF 2015



- extremely bright due to 14 Joules total flash energy of the impulse group and light bundling with fensel lens, low power consumption (energy-saving)
- choice of three different flash combinations with fast flash rate (PMF 2015: two flash combinations)
- extremely reliable and durable due to the use of state-of-the-art electronic components – no replacement of mechanical or electrical wearing parts necessary
- large variety of mounting methods – direct or using a bracket
- exchangeable due to broadly used drilling template
- extremely reliable and durable: fit it and forget it!
- especially suitable for cranes and floor conveyors
- highest mechanical stability, shock tested as per DIN EN 60069-2-29 (PMF 2020, GL approval is standard)
- flash tube additionally secured by a steel clamp

Range as per EN 54

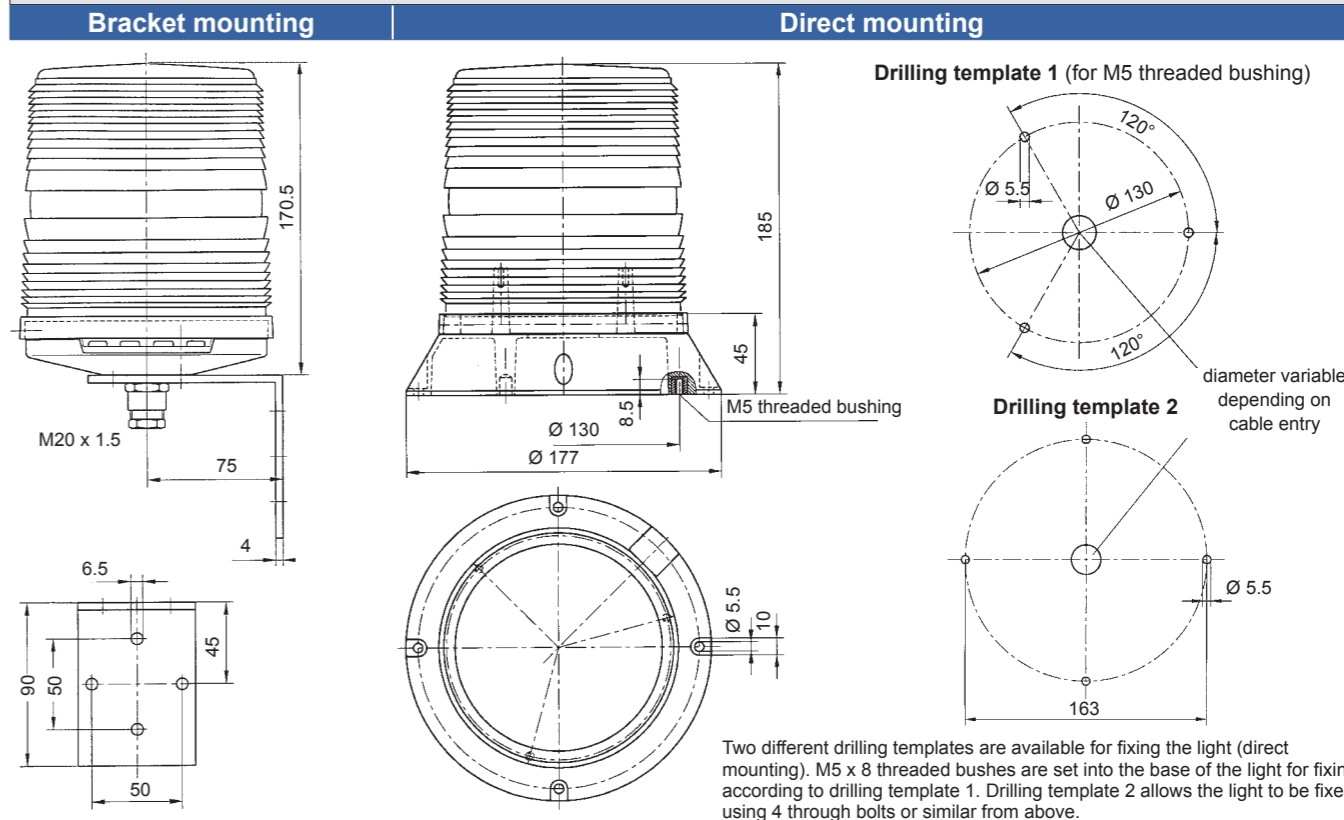
Protection system

Operating temperature

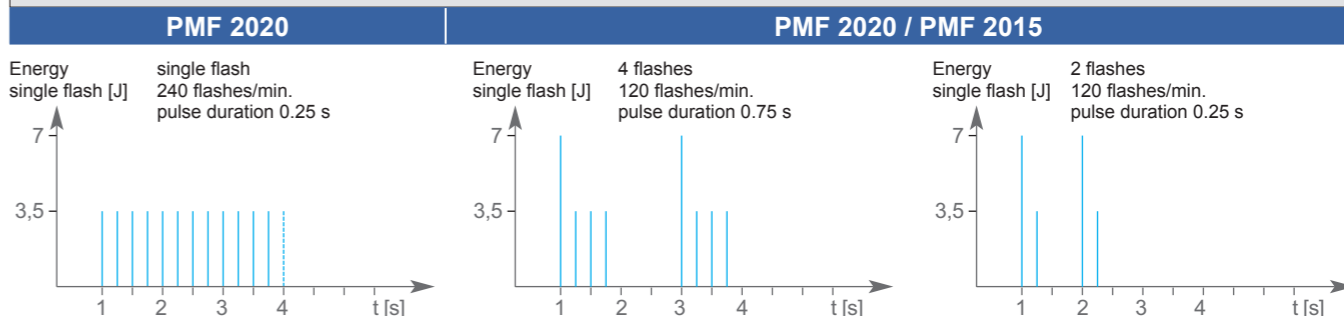
Electrical data	PMF 2020				PMF 2015				
	230 V AC	110 V AC	24 V DC	12 V DC	230 V AC	110 V AC	24 V DC	12 V DC	
Rated voltage	230 V AC	110 V AC	24 V DC	12 V DC	230 V AC	110 V AC	24 V DC	12 V DC	
Rated frequency	50 Hz / 60 Hz		50 Hz / 60 Hz		50 Hz / 60 Hz		50 Hz / 60 Hz		
Operating range	195 – 253 V	90 – 135 V	18 – 30 V	11 – 15 V	195 – 253 V	90 – 135 V	18 – 30 V	11 – 15 V	
Nominal current consumption	4 flashes	0.08 A	0.14 A	0.75 A	1.1 A	0.07 A	0.14 A	0.6 A	1.1 A
	2 flashes	0.09 A	0.15 A	0.8 A	1.15 A	0.08 A	0.16 A	0.65 A	1.2 A
	single flash	0.14 A	0.23 A	1.0 A	1.35 A				

Mechanical data	PMF 2020		PMF 2015	
	quad, double, single flash		quad, double flash	
Flash energy of the main flash	7 Joules (12 V: 5 Joules)		7 Joules	
Light intensity (DIN 5037)	clear lens	200 cd		
Lens colours	clear, amber, red, green, blue			
Lens type	lens with fresnel characteristic			
Beam angle	vertical	approx. 16°		
	horizontal	360°		
Operating temperature	- 30 °C ... + 55 °C			
Storage temperature	- 40 °C ... + 70 °C			
Relative humidity	90%			
Protection system according to EN 60529	IP 55 (vertical mounting)			
Duty cycle	100%			
Service life of the flash tube	light emission still 70% after 8,000,000 flashes			
Material	lens	polycarbonate (PC)		
	housing	bracket mounting: polycarbonate (PC) / direct mounting: acrylonitrile butadiene styrene (ABS)		
Cable entry for bracket mounting	M20 x 1.5	M20 x 1.5 for cables 6.5 - 13.5 mm		
Connecting terminals	single wire 0.5 = 2.5 mm ² , fine wire 0.5 = 1.5 mm ² , with cable end sleeves			
Weight	bracket mounting	AC: 1.1 kg / DC: 1.2 kg		
	direct mounting	AC: 0.6 kg / DC: 0.7 kg		

Dimensions



Flash rate



Ordering details

Article numbers	PMF 2020 direct mounting GL		PMF 2020 bracket mounting GL		PMF 2015 direct mounting		PMF 2015 bracket mounting	
	230 V AC	24 V DC	230 V AC	24 V DC	230 V AC	24 V DC	230 V AC	24 V DC
amber	21009104001	21009804001	21009104011	21009804011	21007104000	21007804000	21007104010	21007804010
red	21009105001	21009805001	21009105011	21009805011	21007105000	21007805000	21007105010	21007805010

Article numbers for other colours and voltages on request

Options / accessories



See page 120 for further information

Conformity to standards

The visual characteristics of flashing 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