

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

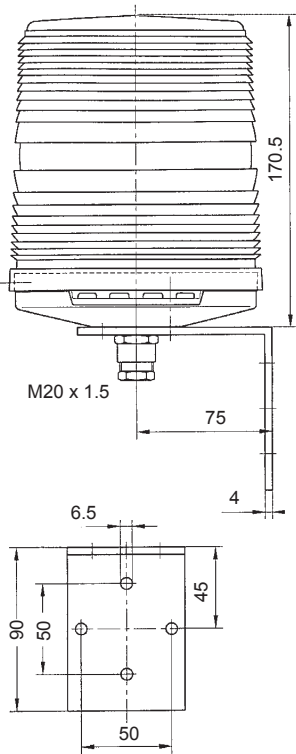
Electrical data		PMF 2020				PMF 2015			
Rated voltage		230 V AC	110 V AC	24 V DC	12 V DC	230 V AC	110 V AC	24 V DC	12 V DC
Rated frequency		50 / 60 Hz	50 / 60 Hz			50 / 60 Hz	50 / 60 Hz		
Operating range		195 – 253 V	90 – 135 V	18 – 30 V	11 – 15 V	195 – 253 V	90 – 135 V	18 – 30 V	11 – 15 V
Nominal current 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 A	1.35 A				

Mechanical data		PMF 2020		PMF 2015	
Operating mode		quad, double, single flash		quad, double flash	
Flash energy of the main flash		7 J (12 V: 5 J)		7 J	
Light intensity (DIN 5037) ¹		200 cd			
Lens colours		clear, amber, red, green, blue			
Lens type		lens with fresnel characteristic			
Beam angle	vertical	approx. 16 °			
	horizontal	360 °			
Operating temperature		- 40 °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	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 DIN 46228/1			
Weight	bracket mounting	AC: 1.1 kg / DC: 1.2 kg			
	direct mounting	AC: 0.6 kg / DC: 0.7 kg			

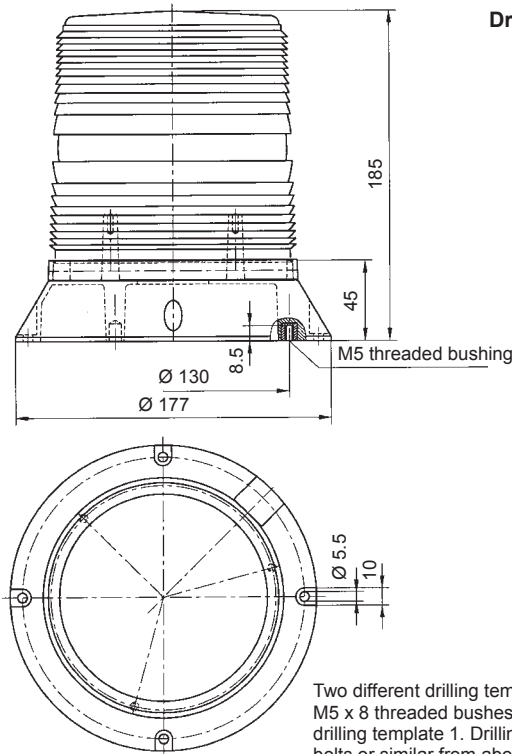
¹ with a clear lens

Dimensions

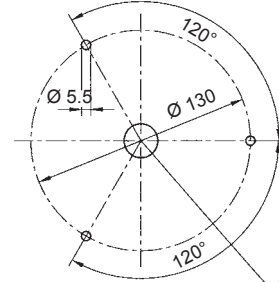
Bracket mounting



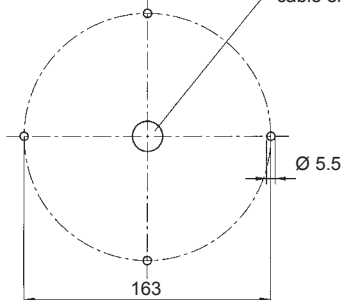
Direct mounting



Drilling template 1 (for M5 threaded bushing)



Drilling template 2



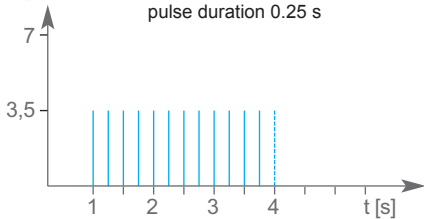
Two different drilling templates are available for fixing the light (direct mounting). M5 x 8 threaded bushes are set into the base of the light for fixing according to drilling template 1. Drilling template 2 allows the light to be fixed using 4 through bolts or similar from above.

Flash rate

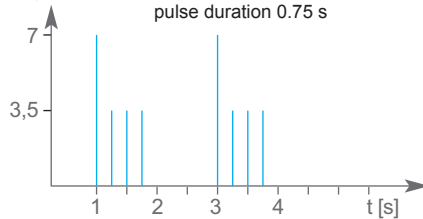
PMF 2020

PMF 2020 / PMF 1015

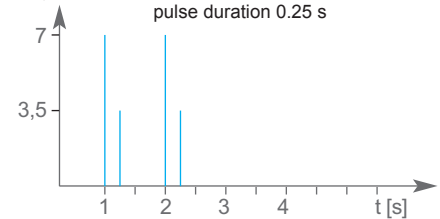
Energy single flash [J] single flash
240 flashes/min.
pulse duration 0.25 s



Energy single flash [J] 4 flashes
120 flashes/min.
pulse duration 0.75 s



Energy single flash [J] 2 flashes
120 flashes/min.
pulse duration 0.25 s



Ordering details

Article numbers		PMF 2020 direct mounting GL		PMF 2020 bracket mounting GL		PMF 1015 direct mounting		PMF 1015 bracket mounting	
Lens colour	Rated voltage	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 118 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