

All-round flashing lights 10 Joules PMF 2015-SIL



- extremely bright flashing light by light bundling with fensel lens, low power consumption
- to signal dangerous situations in safety-relevant application such as process and plant safety, e.g.
 - leaks / gas warning
 - high-pressure / overfilling and machine safety, e.g. as
 - start-up warning
 - muting indication
 - machine stop delay warning
- by means of integrated self-monitoring of the devices the normative required, regular inspection of warning devices is ensured
- the warning devices can be implemented in Safety Instrumented Systems (SIS) up to **SIL 2**

We would be more than happy to provide all safety-technical key data.

Range as per EN 54

Protection system

Operating temperature

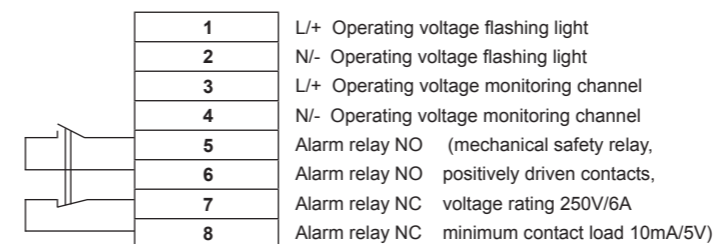
Electrical data		PMF 2015-SIL	
Rated voltage		230 V AC	24 V DC
Operating range		50 Hz / 60 Hz	
Operating range		195 – 253 V	18 – 30 V
Nominal current consumption	flashing light	250 mA	700 mA
	diagnostics channel	100 mA	65 mA
Diagnostics channel	contact version	positively driven contact (1 x NC, 1 x NO)	
	switching current	max. 6 A	
	switching voltage	max. 250 V AC	
	max. switching power (AC)	1500 VA	
	recommended minimum load	> 50 mW	

Mechanische Daten		PMF 2015-SIL
Flash frequency of the main flash		1 Hz = 60 flashes/min.
Flash energy of the main flash		10 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 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

Dimensions

Bracket mounting	Direct mounting
	<p>Drilling template 1 (for M5 threaded bushing)</p> <p>Drilling template 2</p> <p>diameter variable depending on cable entry</p>
	<p>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.</p>

Connection diagram



Ordering details

Article numbers		PMF 2015-SIL direct mounting		PMF 2015-SIL bracket mounting	
Lens colour	Rated voltage	230 V AC	24 V DC	230 V AC	24 V DC
amber		210 07 10 4 601	210 07 80 4 601	210 07 10 4 611	210 07 80 4 611
red		210 07 10 5 601	210 07 80 5 601	210 07 10 5 611	210 07 80 5 611

Article numbers for other colours and voltages on request

Options / accessories



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'.

The visual alarms fulfill the requirements to the functional safety according to:

- EN 61508 Functional safety of electrical/electronic/programmable electronic safety-related systems
- EN 61511 Functional safety - Safety instrumented systems for the process industry sector

The devices can be used in safety related control systems in accordance with the following standards:

- EN ISO 13849-1 Safety of machinery - Safety related parts of control systems – part 1
- EN 62061 Safety of machinery - Functional safety of electrical/electronic/programmable electronic safety-related systems