

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 |

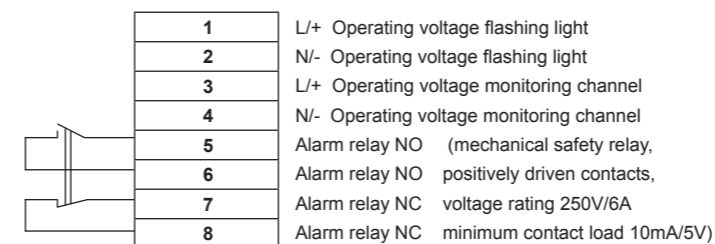
| Electrical data | | PMF 2015-SIL | |
|-----------------------------|---------------------------|--|-----------|
| Rated voltage | | 230 V AC | 24 V DC |
| Operating range | | 50 Hz / 60 Hz | |
| Operating range | | 195 – 253 V | 18 – 30 V |
| Nominal current consumption | flashing light | 250 mA | 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>diameter variable depending on cable entry</p> <p>Drilling template 2</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