

EEx II Double Strobe Light dSLB 16

**Optical signalling device for use
in areas with explosive atmospheres
in group II and zones 1 + 2
with integrated monitoring function**

- ▶ EEx de IIC T6
- ▶ Protection class II
(no equipotential bonding necessary)
- ▶ Protection degree IP 66
- ▶ Signal colours: transparent, red,
yellow, green, blue
- ▶ Two separate flash systems
- ▶ Monitoring function

3



Application

The EEx strobe light dSLB 16 was developed for use in areas with explosive atmospheres in group II and for rough ambient conditions. Special importance was placed on operational reliability. The electronics are redundant, i.e. all electric wearing parts including the flash tubes are installed twice. When the strobe light is switched on, the flash system BL 1 is in operation. Should it fail for whatever reason, the flash system BL 2 is activated automatically. The built-in output relay contact indicates this process to a control panel or switchboard. This is a significant advantage for the service response time. The device is designed to conform to protection class II, i.e. no equipotential bonding is necessary.

Design

The glass cap, which is made of thick hardened borosilicate glass, is bonded explosion-proof to the inside housing of seawater-proof aluminium. Combined with the screw-on mounting platform, this unit constitutes the flameproof component enclosure. The hinged terminal enclosure, which is realised in the explosion protection mode "increased safety", forms the cover of the device. For corrosion-protection reasons and compliance with protection class II, the aluminium inside housing is encased in tough polyurethane.

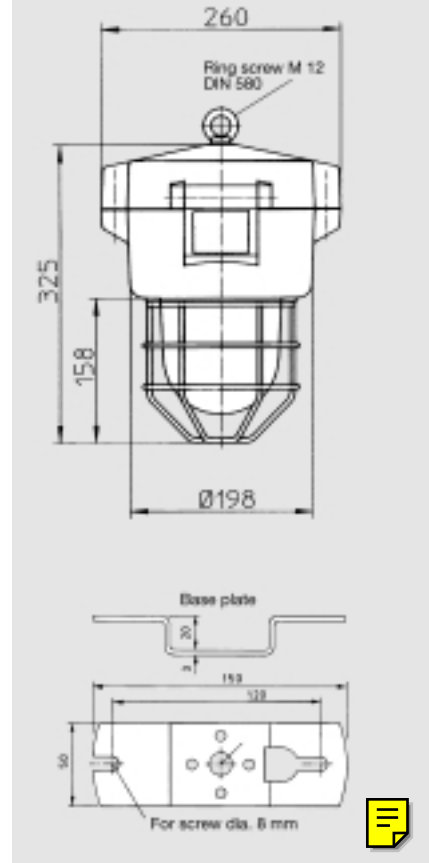
Danger warning in the chemical industry

The electronics are redundant, i.e. all electric wearing parts including the flash tubes are installed twice.

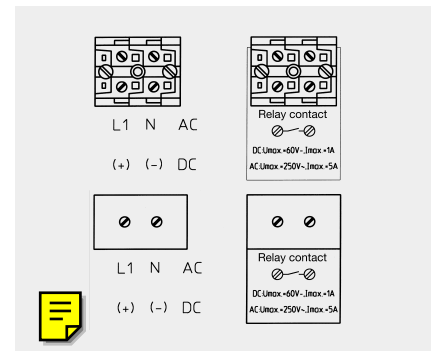


Technical specifications

Housing	Seawater-proof aluminium inside, high-grade polyurethane outside
Colour	Black
Cap	Hardened borosilicate glass
Signal colours	Transparent, red, yellow, green, blue
Protective cage	Stainless steel, epoxy coated
Protection degree	IP 66 (IEC 529)
Protection class	II (no equipotential bonding necessary)
Cable gland	M 20 x 1,5 blind plug M 20 x 1,5
Connection terminals	Cross section: 2,5 mm ² single wire 1,5 mm ² fine wire
Operating conditions	Indoors and outdoors
Operating position	Hanging or standing (Warning! The device may not be mounted horizontally.)
Operating mode	Continuous
Light source	7.5 joule per flash system
Average lifetime	Approx. 5 x 10 ⁶ flashes
Monitoring function	When the light is switched on, flash system BL 1 is activated. Should BL 1 fail, the flash system BL 2 is switched on automatically. This process is reported to a control panel or switchboard by an output relay contact.
Output relay contact	DC version: voltage 60 VDC, current 1 A AC version: voltage 250 VAC, current 5 A
Temperature range	
Operation	-20° C to +40° C
Storage	-25° C to +70° C
Expl. protection class	EEx de IIC T6
Approval	PTB-No. Ex-95.D.2027 ATEX certification applied for
Weight	Approx. 8.5 kg



Wiring diagram



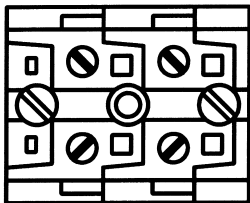
* The full article number is made up by appending the colour code for the coloured cap to the article numbers given below.

transp.	01
red	02
yellow	03
green	04
blue	05

Order information

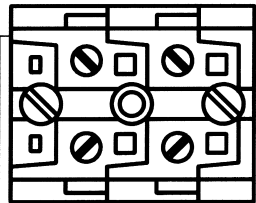
Type	Name	Rated voltage U _e	Operating voltage range U _e	Current consumption	Fuse 5 x 20	Art. no.*
dSLB 16	EEx II Double Strobe Light	12 VDC	9– 15 V	0.70 A	1xT 2 A + 2xT 1 A	224 851 ..
dSLB 16	EEx II Double Strobe Light	24 VDC	18– 30 V	0.35 A	1xT 1 A + 2xT 0.5 A	224 852 ..
dSLB 16	EEx II Double Strobe Light	48 VDC	30– 60 V	0.18 A	1xT 0.5 A + 2xT 0.25 A	224 853 ..
dSLB 16	EEx II Double Strobe Light	115 VAC	103–127 V	0.07 A	2xT 0.5 A + 1xM 0.032 A	224 856 ..
dSLB 16	EEx II Double Strobe Light	230 VAC	207–253 V	0.03 A	2xT 0.2 A + 1xM 0.032 A	224 857 ..

T = time lag, M = medium time lag



L1 N AC

(+) (-) DC

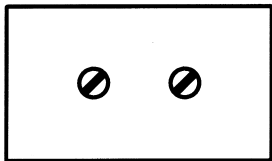


Relay contact



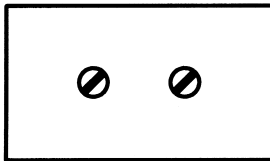
DC: $U_{max.} = 60V -$, $I_{max.} = 1A$

AC: $U_{max.} = 250V \sim$, $I_{max.} = 5A$



L1 N AC

(+) (-) DC



Relay contact



DC: $U_{max.} = 60V -$, $I_{max.} = 1A$

AC: $U_{max.} = 250V \sim$, $I_{max.} = 5A$

