ZAB1-2 EXPLOSION PROOF BEACON

DS-172 Issue 13









ZIZTEL ZAB1-2 FLASHING BEACON RANGE

Corrosion proof all stainless steel construction – long through life, minimal maintenance

IP68 - 60 C to + 70 C Weather proof / environmentally
rated – suitable for harsh climatic conditions

No moving parts – solid state controlled

Redundant light source - high security duplicated xenon tubes

Zone 1 ATEX and IECEx certified - safe for use in potentially explosive areas world-wide.

The Ziztel ZAB1-2 is a rugged explosion proof electronic flashing beacon which employs a Xenon discharge tube light source to produce brilliant pulses of visible light. The unit is specified for safety applications where acoustic alarms are ineffective due to excessive ambient noise and provides high performance visual warning annunciation. For example use on life dependant critical applications (including service on PAGA Public Address and Alarm Systems) and is designed for reliable operation in aggressive climatic conditions on both land based and marine / offshore installations. The ZAB1-2 beacon is available in a range of colour optic lenses which are carefully designed to enhance available flash energy and therefore overall flashing beacon visibility. The unit utilises a totally rot proof stainless steel construction which minimises routine service and ensures low through life maintenance cycles. The light source eliminates moving parts and is guaranteed to deliver in excess of six million light pulses without tube assembly deterioration.

Image left shows ZAB1-2 Exd version with integral termination chamber. Fixing brackets are available to enable simple, rapid vertical installation or wall / bulk head mounting.



The ZAB1-2 is a cost effective high performance ATEX / IECEx certified flashing beacon which incorporates redundant tubes and telephone ring detection as standard. The design eliminates moving parts and the electro/optic conversion provides high efficiency. A range of beacon colours are available ensuring compliance with international standards including IMO SOLAS, PFEER



ZAB1-2 - Xenon flash tube based light source

This variant employs *duplicated* high security 21 Joule flash gas discharge tubes that deliver a brilliant pulse of high intensity light struck at one second intervals visible over a 360 degree envelope. Installation attitude can be vertical, horizontal or upright (i.e. well glass 'down' or 'up').

ZAB1-2 e or d - Exe termination chamber / Exd termination options D E

The ZAB1-2 can be delivered with either an auxiliary *Exe cable termination compartment* (adding suffix 'E' to the order code model number or, for lower cost applications, the field cables can be landed as 'direct' entries into the main Exd beacon vessel with the model D variant. Where required the unit can be delivered with pre formed fire resistant cable tail to speed on site installation.

Two 20mm isometric entries are pre-cut enabling engagement of standard certified cable gland.

ZAB1-2 Telephone initiate

With Telephone Initiate specified the beacon can be connected to a telephone circuit and ring voltage detection initiates the beacon. Note that telephone initiate is a standard feature and there is no cost impact.

ZAB1-2 C, Y, B, R, A, G - lens colour suffix



ZAB1-2 24 / 48 / 115 / 230 - Mains supply input voltage preference

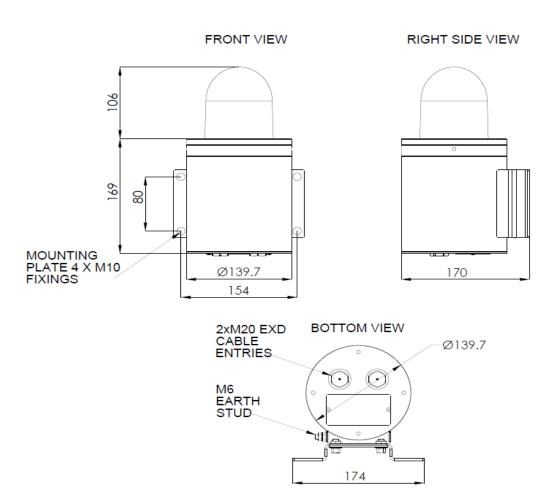
A range of input voltages are available ensuring compatibility with virtually all mains power supply systems. DC supply input 24 - 48 V, AC supply input 110 / 120 - 220 / 240 V - 270 V 50 / 60 Hz

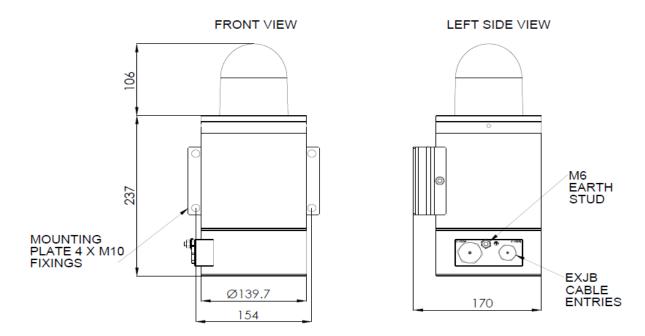
ZAB1-2 Well glass guard protection option P

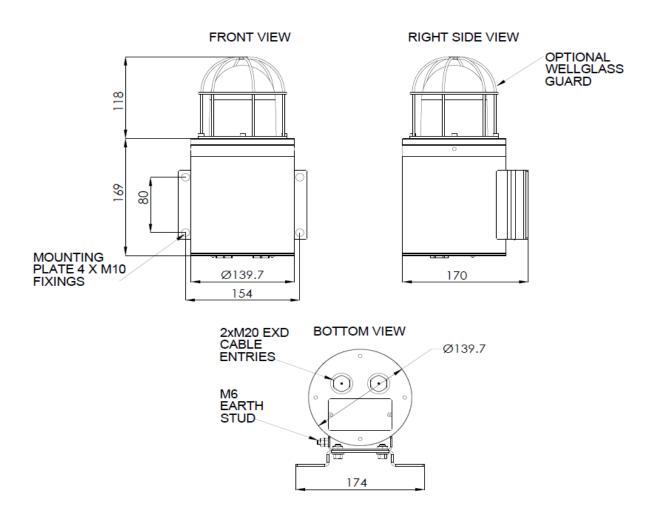
The ZAB1-2 employs a toughened well glass lens and is certified for safe operation without any further protection. However in applications where there is a known risk of severe well glass impact we advise the user to consider ordering the beacon with additional protection by specifying the option for a heavy duty stainless steel wire cage.

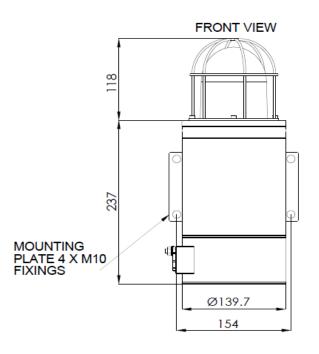
ZAB1-2 Integral siren option S

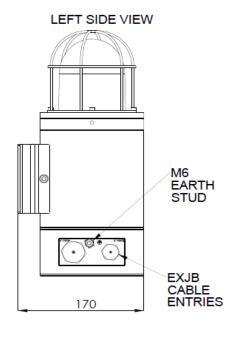
The ZAB1-2 S incorporates an alarm tone generator module which provides acoustic warning capability. A 100 Volt line Ex certified horn can be connected to realise a complete optical / acoustical signalling package.











| Technical Specification | |
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| Light Source | Dual xenon discharge tube |
| Supply Voltage | 110 /120; 220 /240; 270 VAC 50 / 60 Hz; 24; 48 VDC |
| Supply Voltage Tolerance | +10% / -15% |
| Consumption | 30 Watts / VA (60 Watts / VA peak); 50 Watts 'S' option |
| 'T' Option Telephone ring | 20 to 100V RMS |
| voltage range | |
| Telephone ring cadence | On time 1 second minimum, off or silent time 3 seconds maximum |
| 'S' Option Siren generator | Drive for up to two 100 Volt line Ex projector horns - maximum |
| | sound pressure level at 1 metre is +112 dBA |
| Flash rate | 1 Hz |
| Duty cycle | Continuous |
| Flash energy – xenon tube set | 21 joule |
| Temperature Range | -60°C - +70°C |
| IP Rating | IP66 / 68 |
| Weight Exd variant | 4.5Kg |
| Weight Exe variant | 6Kg |
| Dimensions Exd variant | 170 x 290 mm with guard – 275 mm without guard |
| Dimensions Exe variant | 170 x 355 mm with guard – 343 mm without guard |
| Gland entry | 2 x 20 mm isometric |
| Mounting attitude | Vertical or horizontal |
| Enclosure material | Corrosion proof 316g all stainless steel |
| Enclosure colour | Natural |
| Lens colour | Red, Yellow, Green, Blue, White, Amber, split colour Green / White |
| Gland Entry | 2 x M20 Isometric |
| Location | Hazardous area Zone 1 IIC T4 |
| Certification | ATEX and IECEx |



ZAB 1-2 Explosion proof xenon flashing beacons are available in a range of lamp colours which are assigned by fitting of a specially designed Fresnel lens to maximise optical performance.

Ref TDS010 Technical bulletin sheet which describes ZAB1-2 PAGA, Telephone PBX and alarm / siren applications.



See also ZAB1 - M4 - four colour flashing beacon; eight flash tubes all stainless steel construction