Ex-tech®
SIGNALLING

Datasheet > Audible & visual signalling equipment

SB 125-1 Ex SOUNDER /BEACON

The flameproof SB125-1 sounder and beacon combination is ATEX / IECEx certified for use in potentially explosive atmospheres and provides clear visual and audible status indication (can be labelled accordingly). It is constructed from 316L stainless steel.

ATEX / IECEx Certification: ATEX Zone 1 and Zone 2 Certified for gas / vapour and Zone 21 and Zone 22 compliant for dust / powder applications.
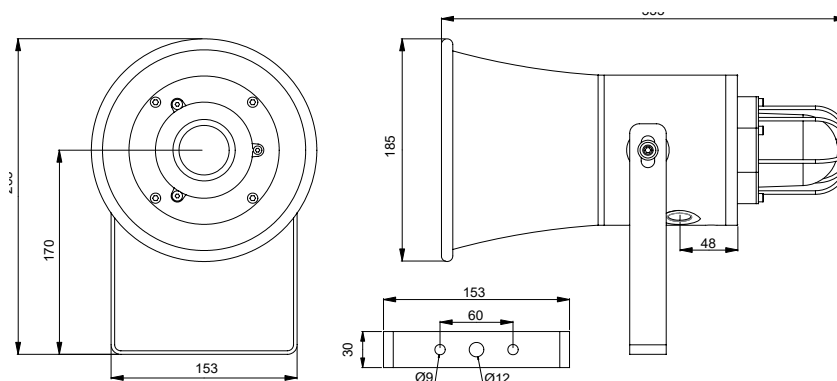
Application: Oil and gas, chemical, petrochemical, pharmaceutical, marine and offshore applications.

Key features: The explosion proof set is provided with sounder and beacon. Robust and highly reliable, the Ex assembly is designed for corrosive environments and hazardous areas. The lens is made with borosilicate glass 3.3. The set is assembled on a stainless steel 316L backplate.

Options: The explosion proof sounder (horn) can be set with up to three tones among 59 prerecorded tones (according to user control system). Pausing of the signal can be done by an external switch. The housing is made of 316L stainless steel covered with UV resistant paint. The mounting bracket is 316L Stainless steel. The explosion proof assembly set can be delivered with two different light sources:

• LED with steady, rotary or flashing of different intensity.
• Flashing with XENON tube of different intensity.
• Four flashing frequencies are selectable.
• One of the beacon can be replaced by a push button or a junction box if required
• The sounder and beacon can be triggered either jointly or independently.

A range of accessories is available to customise this ATEX / IECEx status light package. These include pipe mounting brackets, sunshades, tag and duty labels and other accessories.

Please note that whilst effort has been made to ensure the accuracy of this datasheet. Ex-tech Signalling will not assume liability for the use thereof. Ex-tech Signalling reserves the right to improve specifications without prior notice, please refer to our website for updated information or contact our local sales representative.

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MATERIAL	• **Enclosure:** Stainless steel 316L • **Lens:** Tempered borosilicate glass 3.3		
HOUSING COLOUR	• RED : RAL3001 • BLACK : RAL9005 • ORANGE : RAL2010	• YELLOW : RAL1018 • GREEN : RAL6032	• BLUE : RAL5005 • GREY : RAL7038
INGRESS PROTECTION	• IP66/67		
AMBIENT TEMPERATURE FOR OPERATION	• **T6** = - 40°C ~ + 55°C , **T5** = - 40°C ~ + 60°C, **T4** = - 40°C ~ + 70°C		
CERTIFICATION	• **Presafe** 13 ATEX 1566X, IECEX NEM 13.0036X		
EX CODE	⟨Ex⟩ • II 2 GD Ex db IIC T4 ~ T6 Gb • Ex tb IIIC T135°C ~T85°C Db		
STANDARD	• EN / IEC 60079-0, EN / IEC 60079-1, EN / IEC 60079-31, EN 54-3		
ATEX AREA ZONE	• **Gas zone:** 1 & 2 **Dust zone:** 21 & 22		
CANDELA LENS COLOUR	• Red: 0.15 • Amber: 0.51 • Blue: 0.12 • Green: 0.49 • Yellow: 0.85 • Clear: 1		

LIGHT TYPE	Flash tube (XENON)		LED	
TRUE LIGHT INTENSITY	• **5 joules** = 109 Cd • **15 joules** = 395 Cd	• **10 joules** = 293 Cd • **21 joules** = 424 Cd	• **5 W** = 128 Cd	• **10W** = 312 Cd
PEAK LIGHT INTENSITY	• **5 joules** = 35970 Cd • **15 joules** = 83345 Cd	• **10 joules** = 66804 Cd • **21 joules** = 95824 Cd		
LIFETIME	• Emissions are reduced to 70% after 8 million flashes		• >50 000 hours without luminosity decreasing	
FLASHING OR ROTARY FREQUENCY (0 = steady status)	• 60/80/120 times/min • 100/120/150 times/min • 120/150/180 times/min		• 60/75/0 times/min • 60/75/100 times/min • 75/95/0 times/min • 75/95/120 times/min	
CONSUMPTION	• **5 joules** = 10W • **15 joules** = 20W	• **10 joules** = 15W • **21 joules** = 25W	• **5W**	• **10W**

AMBIENT HUMIDITY*	• Up to 95%*		
POWER SUPPLY	• 12-48V DC	• 100-240V AC (50/60hz)	
RATED IMPULSE WITHSTAND VOLTAGE	• 1kV following IEC 61000-4-5		

WORKING CURRENT LED	• **Power**	12V DC	24V DC	48V DC	110V AC	220V AC
	• **5W**	530 mA	260 mA	120 mA	80 mA	40 mA
	• **10W**	1100 mA	530 mA	240 mA	160 mA	80 mA

WORKING CURRENT XENON	• **Energy**	12V DC	24V DC	48V DC	110V AC	220V AC
	• **5J**	460 mA	280 mA	140 mA	60 mA	35 mA
	• **10J**	850 mA	490 mA	250 mA	100 mA	60 mA
	• **15J**	1200 mA	700 mA	360 mA	140 mA	80 mA
	• **21J**	NA	960 mA	480 mA	180 mA	110 mA

CONSUMPTION SOUNDER	• Adjustable from 5 to 25W (factory setting 20W)

* = without runoff - ** = optional (cable gland and blanking plugs can be supplied if required)

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CURRENT CONSUMPTION	• 0.5 to 1 A
SIGNALLING TYPE	• 59 tones siren
NOISE LEVEL	• Until 115 dB at 1m
CABLES ENTRY	• 2 x M20, 1 x M25 + 1 x M20, 1 x 1/2" NPT + 1 x M20, 1 x 3/4" NPT + 1 x M20
TERMINAL	• From 22 to 14 AWG - from 0.50 mm² to 2.5 mm²
NET WEIGHT	• 8.0 Kg

* = without runoff - ** = optional (cable gland and blanking plugs can be supplied if required)

Meaning of lens colour usage in the international standard (IEC 60073)

Colour	Meaning	Action	Example
● RED	EMERGENT	Dangerous state. Take immediat action.	Pressure/Temperature beyond the safe state - Shutdown due to the action of protective devices - Fire alarm - Equipment failure alarm
● AMBER ● YELLOW	ABNORMAL	Abnormal state, near the critical status	Pressure/Temperature above the normal range - Protective device released - Toxic and harmful gases release alarm
● GREEN	SAFE	Normal state	Pressure/Temperature in normal state - Automatic control system is operating normally
● BLUE	MANDATORY	Requires operator's action	Emergency evacuation - Abandon rescue and escape - Abandon platform or abandon ship - Enter the command
○ CLEAR	NO SPECIAL SIGNIFICANCE	If uncertainty for other colors, clear is allowed to be used	General information - Can't exactly use red, yellow, green or blue - Used for the implementation of command - Indicate the measured values

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Product	Certification	Lens colour	Light type	Supply	Duty label	Tag label	Lens guard	Connection	Housing colour	Standard
SB	**125**	**R**	**X10**	**DC**	**N**	**Y**	**Y**	**A**	**RD**	**N**

BC	= SOUNDER BEACON			N/A	
125	= HAZARDOUS AREA			RD ●	= RED (STD)
126	= NON-CERTIFIED			YW ●	= YELLOW
R ●	= RED			BU ●	= BLUE
A ●	= AMBER			BL ●	= BLACK
B ●	= BLUE			GN ●	= GREEN
G ●	= GREEN			GY ●	= GREY
Y ●	= YELLOW			OJ ●	= ORANGE
C ○	= CLEAR			OR ○	= OTHER
X05	= XENON 5J			A = 2 x M20 x 1.5	
L05	= LED 5W			B = 1 x M25 x 1.5 & 1 x M20 x 1.5	
X10	= XENON 10J			C = 1 x 1/2" NPT & 1 x M20 x 1.5	
L10	= LED 10W			D = 1 x 3/4" NPT & 1 x M20 x 1.5	
X15	= XENON 15J			Additional adaptors can be supplied as well as blanking plugs and cable glands, see below.	
X21	= XENON 21J				
DC	= 12 - 48V DC			Y	= YES
AC	= 100 - 240V AC			N	= NO
Y	= YES (SEE LIST)			Y	= YES
N	= NO			N	= NO

CONDUIT ACCESSORIES	
M20 316L St. St Exd conduit plug	SPARE3060009
St. St Exd cable gland 10-16mm	SPARE3060109
½" NPT St. St. conduit adaptor	SPARE3060106
St. St Exd cable gland 7-12mm	SPARE3060108
M25 St. St. conduit adaptor	SPARE3060105
¾" NPT St. St. conduit adaptor	SPARE3060107

CONDUIT ACCESSORIES	
M20 NPB Exd conduit plug	SPARE3060008
NPB Exd cable gland 10-16mm	SPARE3060018
½" NPT NPB conduit adaptor	SPARE3060019
NPB Exd cable gland 7-12mm	SPARE3060108
M25 NPB conduit adaptor	SPARE3060105
¾" NPT NPB conduit adaptor	SPARE3060002

Phone: +44 (0)1752 333 933 | E-mail: sales@ex-techsignalling.com | Website: www.ex-techsignalling.com

Ex-tech Signalling Bell Close, Plympton, Devon, PL7 4JH, UK