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www.inpratex.com

## EXPLOSION PROOF PRODUCTS AND SOLUTIONS FOR

HAZARDOUS AREAS.

## **Equipment supply, Engineering and Manufacturing.**

Inpratex provides a wide range of custom-made products and solutions for different industries operating in hazardous and potentially explosive environments.



Inpratex SL is based in Eibar (Gipuzkoa, Spain). We are specialists in supplying equipment, in engineering and in the manufacture of products for industries working in Hazardous Areas.

Our engineering team provides solutions combining the limitations related to the use of the equipment with the potentially dangerous environment in which it must be used.

Inpratex supplies ATEX/IECEx equipment and custom-made solutions for manufacturing and process industries.











Visual and acoustic signaling equipment certified for installation in ATEX environements.

Heavy-duty, rugged signal beacons ideal for use in oil refineries, off-shore platforms, chemical, petrochemical and marine industries, always with the required degree of safety for each hazardous area.

Inpratex also provides sirens and high-volume loudspeakers made from highly resistant materials.

The full range includes combined visual and acoustic equipment.

3.1 - OPTICAL SIGNALLING	6
3.2 - ACOUSTIC SIGNALLING	24
3.3 - OPTICAL & ACOUSTIC SIGNALLING	40



**BC 150 LED BEACON / LIGHT - GRP** 



This beacon is certified for use in ATEX/Explosive Atmosphere, zone 1 & 2 for gas and zone 21 & 22 for dust. It is dedicated for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

It's designed for corrosive environnements and hazardous area. The BC150 can also be used as status light.

Housing is moulded Glass-Reinforced Polyester (GRP), dyed in the mass and protected by an UV resistant paint, the lens is made of borosilicate glass.

Four flashing frequencies are selectable.

Optionally it is possible to control the beacon via a telephone line.

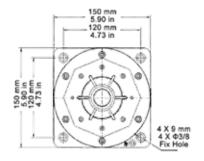


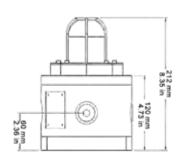


**EU-Type Examination Certificate** 

ITEM REFERENCES				
Designation:	Item No.:			
BC 150 12-48 VDC LED 10W Red	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A1801		
BC 150 12-48 VDC LED 10W Amber	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A1802		
BC 150 12-48 VDC LED 10W Blue	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A1803		
BC 150 12-48 VDC LED 10W Green	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A1804		
BC 150 12-48 VDC LED 10W White	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A1805		
BC 150 100-240 VAC LED 10W Red	110VAC-160mA / 220VAC-80mA	2A1806		
BC 150 100-240 VAC LED 10W Amber	110VAC-160mA / 220VAC-80mA	2A1807		
BC 150 100-240 VAC LED 10W Blue	110VAC-160mA / 220VAC-80mA	2A1808		
BC 150 100-240 VAC LED 10W Green	110VAC-160mA / 220VAC-80mA	2A1809		
BC 150 100-240 VAC LED 10W White	110VAC-160mA / 220VAC-80mA	2A1810		

	TECHNICAL SPECIFICATIONS			
	TECHNICAL SPECIFICATIONS			
Marking:	II 2G Ex d IIC T4-T6 Gb II 2D Ex tb IIIC T135°C, T85° IP66			
Certificate:	EU-Type Examination Certificate			
Operating mode:	Steady / Rotary / Fixed / Blinking			
Housing:	Moulded Glass-Reinforced Polyester (GRP). Lens is made of borosilicate glass.			
Enclosure colour:	Standard: Red (RAL 3001) On request: Black (RAL 9004)   Yellow (RAL 1018)   Blue (RAL 5005)			
Power:	10W			
Light intensity:	312 Cd			
Weight:	3,8 kg			
Operating temperature:	-40°C to +55°C (T6) / -40°C to +60°C (T5) / -40°C to +70°C (T4)			
Ingress protection:	IP66/67			
Cable entries:	4xM20x1,5 holes			







BC 125 Ex Beacon - Status Light. This beacon is certified for use in explosive atmosphere, zones 1 & 2 for gas and zones 21 & 22 for dust. It is dedicated for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

It's designed for corrosive environnements and hazardous area. The BC125 can also be used as status light.

Optionally it is possible to control the beacon via a telephone line.





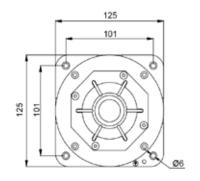


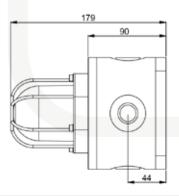
Housing in stainless steel 316L covered with UV resistant paint, the lens in borosilicate glass.

**EU-Type Examination Certificate** 

ITEM REFERENCES				
Designation:	Power consumption:	Item No.:		
BC 125 12-48 VDC LED 10W Red	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A2101		
BC 125 12-48 VDC LED 10W Amber	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A2102		
BC 125 12-48 VDC LED 10W Blue	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A2103		
BC 125 12-48 VDC LED 10W Green	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A2104		
BC 125 12-48 VDC LED 10W White	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	2A2105		
BC 125 100-240 VAC LED 10W Red	110VAC-160mA / 220VAC-80mA	2A2106		
BC 125 100-240 VAC LED 10W Amber	110VAC-160mA / 220VAC-80mA	2A2107		
BC 125 100-240 VAC LED 10W Blue	110VAC-160mA / 220VAC-80mA	2A2108		
BC 125 100-240 VAC LED 10W Green	110VAC-160mA / 220VAC-80mA	2A2109		
BC 125 100-240 VAC LED 10W White	110VAC-160mA / 220VAC-80mA	2A2110		

	TECHNICAL SPECIFICATIONS
Marking:	II 2G Ex d IIC T4-T6 Gb II 2D Ex tb IIIC T135°C, T85° IP66
Certificate:	EU-Type Examination Certificate
Operating mode:	Steady / Rotary / Fixed / Blinking
Housing:	Stainless Steel AISI 316L. Lens made of borosilicate glass.
Enclosure colour:	Standard: Red (RAL 3001) On request: Black (RAL 9004)   Yellow (RAL 1018)   Blue (RAL 5005)
Power:	10W
Light intensity:	312 Cd
Weight:	4,5 kg
Operating temperature:	-40°C to +55°C (T6) / -40°C to +60°C (T5) / -40°C to +70°C (T4)
Ingress protection:	IP66/67
Cable entries:	4xM20x1,5 holes







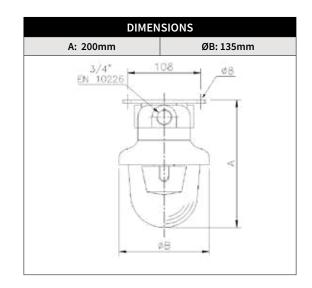
Explosion proof optical signallers suitable for hazardous area Zone 1 & Zone 21. EVC 50/F optical signallers are normally associated to alarm and signalling systems, either fixed or mobile.

They have reduced dimensions, they are completed with blinking Xenon flash lamp.



ITEM REFERENCES							
Designation:	Color:	Voltage/Frequency:	Current:	Power:	Blinking:	Item No.:	
EVC 50/F LB 12/24	Light Blue					2A2501	
EVC 50/F W 12/24	White					2A2502	
EVC 50/F Y 12/24	Yellow	12/24 VAC/DC	00 120	1 214	75	2A2503	
EVC 50/F O 12/24	Orange		90130 mA	13 W	75 cycles/min	2A2504	
EVC 50/F R 12/24	Red					2A2505	
EVC 50/F G 12/24	Green					2A2506	
EVC 50/F LB 110	Light Blue					2A2507	
EVC 50/F W 110	White						2A2508
EVC 50/F Y 110	Yellow	110 VAC	15 4	1011	110	2A2509	
EVC 50/F O 110	Orange	50/60 Hz	50/60 Hz	15 mA	1,8 W	110 cycles/min	2A2510
EVC 50/F R 110	Red					2A2511	
EVC 50/F G 110	Green					2A2512	
EVC 50/F LB 230	Light Blue					2A2513	
EVC 50/F W 230	White					2A2514	
EVC 50/F Y 230	Yellow	230 V	10 4	2.5.11	110	2A2515	
EVC 50/F O 230	Orange	50/60 Hz	10 mA	2,5 W	110 cycles/min	2A2516	
EVC 50/F R 230	Red					2A2517	
EVC 50/F G 230	Green					2A2518	

TECHNICAL SPECIFICATIONS			
Marking:	II 2G Ex db IIC T6 Gb		
Certificate:	EU-Type Examination Certificate		
Operating mode:	Blinking		
Operating temperature:	-20°C to +40°C		
Ingress protection:	IP65		
Housing:	Aluminium light alloy (RAL 7000) Tempered borosilicate globe		
Connection:	E27		
Thermal emission:	6 J		
Weight:	1,5 kg		
Cable entries:	2x3/4" NPT (cable glands/plugs not included)		



#### ATEX VISUAL SIGNALLING DEVICES

**ZONES 1, 2 (gas) & 21, 22 (dust)** 



Optical signalling is often required for warning or notifying purposes in potentially explosive areas. The Strobe Light dSLB20 provides suitable signalling for these purposes.

It is designed for continuous operation and available for different operating voltages.

The dSLB20 is activated by connecting the power supply. The sturdy housing of ingress protection IP 66/67 is suitable for both indoor and outdoor applications.

The Ex II strobe light has a small flameproof aluminium housing containing the electronics. The cap is made of hardened borosilicate glass.

The terminal compartment is of protection type "increased safety".

A signalling combination can be established using the provided stainless steel mounting plate with integrated junction box.

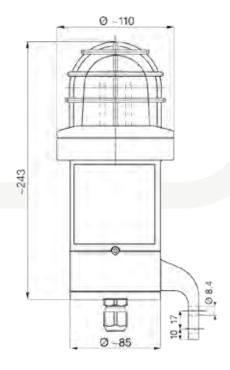


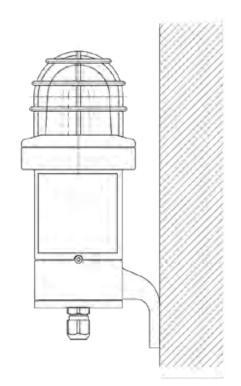
ITEM REFERENCES					
Designation:	Voltage:	Operating range:	Flash energy:	Current consumption:	Item No.:
dSLB 20 15 24 TRANSPARENT	24 VDC	21-53 VDC	15 J	1 A	2A0101A
dSLB 20 15 24 RED	24 VDC	21-53 VDC	15 J	1 A	2A0101B
dSLB 20 15 24 AMBER	24 VDC	21-53 VDC	15 J	1 A	2A0101C
dSLB 20 15 24 GREEN	24 VDC	21-53 VDC	15 J	1 A	2A0101D
dSLB 20 15 24 BLUE	24 VDC	21-53 VDC	15 J	1 A	2A0101E
dSLB 20 15 230 TRANSPARENT	230 VAC	207-253 VAC	15 J	200 mA	2A0103A
dSLB 20 15 230 RED	230 VAC	207-253 VAC	15 J	200 mA	2A0103B
dSLB 20 15 230 AMBER	230 VAC	207-253 VAC	15 J	200 mA	2A0103C
dSLB 20 15 230 GREEN	230 VAC	207-253 VAC	15 J	200 mA	2A0103D
dSLB 20 15 230 BLUE	230 VAC	207-253 VAC	15 J	200 mA	2A0103E
dSLB 20 5 12 TRANSPARENT	12 VDC	10-14 VDC	5 J	600 mA	2A0104A
dSLB 20 5 12 RED	12 VDC	10-14 VDC	5 J	600 mA	2A0104B
dSLB 20 5 12 AMBER	12 VDC	10-14 VDC	5 J	600 mA	2A0104C
dSLB 20 5 12 GREEN	12 VDC	10-14 VDC	5 J	600 mA	2A0104D
dSLB 20 5 12 BLUE	12 VDC	10-14 VDC	5 J	600 mA	2A0104E
dSLB 20 5 24 TRANSPARENT	24 VDC	21-53 VDC	5 J	280 mA	2A0105A
dSLB 20 5 24 RED	24 VDC	21-53 VDC	5 J	280 mA	2A0105B
dSLB 20 5 24 AMBER	24 VDC	21-53 VDC	5 J	280 mA	2A0105C
dSLB 20 5 24 GREEN	24 VDC	21-53 VDC	5 J	280 mA	2A0105D
dSLB 20 5 24 BLUE	24 VDC	21-53 VDC	5 J	280 mA	2A0105E
dSLB 20 5 230 TRANSPARENT	230 VAC	207-253 VAC	5 J	130 mA	2A0108A
dSLB 20 5 230 RED	230 VAC	207-253 VAC	5 J	130 mA	2A0108B
dSLB 20 5 230 AMBER	230 VAC	207-253 VAC	5 J	130 mA	2A0108C
dSLB 20 5 230 GREEN	230 VAC	207-253 VAC	5 J	130 mA	2A0108D
dSLB 20 5 230 BLUE	230 VAC	207-253 VAC	5 J	130 mA	2A0108E

## **EXPLOSION-PROOF STROBE LIGHT DSLB 20**

Zones 1, 2, 21, 22

	TECHNICAL SPECIFICATIONS
Marking:	II 2G Ex d e IIC T5, T6 Gb II 2D Ex tb IIIC T95°C, T80°C Db
Certificate:	EU-Type Examination Certificate
Operating conditions:	Indoor / Outdoor
Operating mode:	Continuous operation
Operating position:	Any
Housing:	Aluminium, surface varnished or powder-coated. Colour: Yellow / Blue
Cap:	Borosilicate glass dome with stainless steel protection cage
Cap colour:	Red, amber, green and blue
Lamp:	Xenon
Flash energy:	5 J / 15 J
Flash frequency:	Approx. 60/min (1 Hz)
Average life cycle	Approx. 5x10 <sup>6</sup> flashes
Weight:	Approx. 2 kg
Operating temperature:	-55°C to +40°C (T6)   -55°C to +55°C (T5)
Ingress protection:	IP66/67
Connection terminals:	Terminal capacity: 2,5 mm² single-wire   1,5 mm² fine-wire Protective earth - Screw connection with wire protection clamp in connection enclosure max. 2.5 mm² Equipotential - Screw connection with wire bonding con-ductor protection clamp outside, cross section max. 4 mm
Cable entries:	1xM20x1,5 plastic cable gland   1xM20x1,5 plug







Optical signalling is often required for warning or notifying purposes in potentially explosive areas. The Strobe Light dSLB 20 LED provides suitable signalling for these purposes. It is designed for continuous operation and available for different operating voltages.

The dSLB 20 LED is activated by connecting the power supply. The sturdy housing of ingress protection IP66/67 is suitable for both indoor and outdoor applications.

The Ex II strobe light has a small flameproof aluminium housing containing the electronics. The cap is made of hardened borosilicate glass. The terminal compartment is of protection type "increased safety".

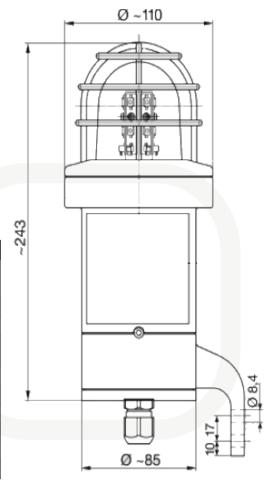
A signalling combination can be established using the provided stainless steel mounting plate with integrated junction box.





ITEM REFERENCES					
Designation:	Operating range:	Item No.:			
dSLB 20 LED 24 TRANSPARENT	24 VDC	2A0202A			
dSLB 20 LED 24 RED	24 VDC	2A0202B			
dSLB 20 LED 24 AMBER	24 VDC	2A0202C			
dSLB 20 LED 24 GREEN	24 VDC	2A0202D			
dSLB 20 LED 24 BLUE	24 VDC	2A0202E			
dSLB 20 LED 220 TRANSPARENT	80265 VAC	2A0204A			
dSLB 20 LED 220 RED	80265 VAC	2A0204B			
dSLB 20 LED 220 AMBER	80265 VAC	2A0204C			
dSLB 20 LED 220 GREEN	80265 VAC	2A0204D			
dSLB 20 LED 220 BLUE	80265 VAC	2A0204E			

TECHNICAL SPECIFICATIONS				
Marking:	II 2G Ex de IIC T5, T6 Gb II 2D Ex tb IIIC T95°C, T80° Db			
Certificate:	EU-Type Examination Certificate			
Operating conditions:	Indoor / Outdoor			
Housing:	Aluminium, surface varnished or powder-coated. Borosilicate glass dome			
Protection cage:	Stainless steel			
Cap colour:	Transparent, Red, Amber, Green, Blue			
Weight:	Approx. 2 kg			
Operating temperature:	-40°C to +40°C			
Ingress protection:	IP66/67			
Cable entries:	1xM20x1,5 plastic cable gland			





SL 150 combined status lights in GRP. This signalling device is certified for use in ATEX zones 1,2 for gas and 21,22 for dust.

Suitable for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

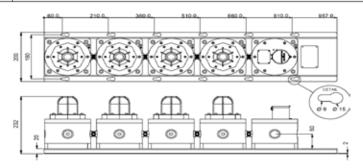
It's designed for corrosive environments and hazardous areas.

Possibility to pilot all, or separately the beacons via a telephone line.



	ITEM REFERENCES		
Designation:	Power consumption:	Weight:	Item No.:
SL-150-A20 24V - 2 beacons	12 - 48V DC	8,9 kg	2A1901
SL-150-A20 220V - 2 beacons	100 - 240V AC	8,9 kg	2A1902
SL-150-B3J 24V - 2 beacons + junction box	12 - 48V DC	13,1 kg	2A1903
SL-150-B3J 220V - 2 beacons + junction box	100 - 240V AC	13,1 kg	2A1904
SL-150-B30 24V - 3 beacons	12 - 48V DC	13,1 kg	2A1905
SL-150-B30 220V - 3 beacons	100 - 240V AC	13,1 kg	2A1906
SL-150-C4J 24V - 3 beacons + junction box	12 - 48V DC	17,4 kg	2A1907
SL-150-C4J 220V - 3 beacons + junction box	100 - 240V AC	17,4 kg	2A1908
SL-150-C40 24V - 4 beacons	12 - 48V DC	17,4 kg	2A1909
SL-150-C40 220V - 4 beacons	100 - 240V AC	17,4 kg	2A1910
SL-150-D5J 24V - 4 beacons + junction box	12 - 48V DC	21,6 kg	2A1911
SL-150-D5J 220V - 4 beacons + junction box	100 - 240V AC	21,6 kg	2A1912
Lens colour: Red, Amber, Blue, Green, Clear			

TECHNICAL SPECIFICATIONS		
Marking:	(	
Certificate:	EU-Type Examination Certificate	
Operating mode:	Steady, rotary, fixed or blinking	
Housing:	ENCLOSURE: Glass Reinforced Polyester. LENS: Tempered borosilicate glass 3.3. FRAME: Stainless Steel 316L	
Housing colour:	Black (RAL 9004)   Red (RAL 3001)   Yellow (RAL 1018)   Blue (RAL 5005)	
Power:	LED 10W	
Light intensity:	312 Cd	
Operating temperature:	-40°C to +70°C	
Ingress protection:	IP66/67	
Cable entries:	3xM20x1,5 holes	





SL-125 combined status lights in stainless steel. This signalling device is certified for use in ATEX zones 1,2 for gas and 21,22 for dust.

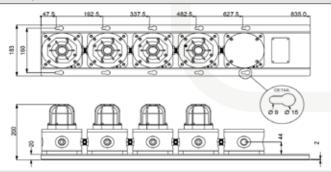
Suitable for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

Possibility to pilot all, or separately the beacons via a telephone line.



	ITEM REFERENCES		
Designation:	Power consumption:	Weight:	Item No.:
SL-125-A20 24V - 2 beacons	12 - 48V DC	10,2 kg	2A2201
SL-125-A20 220V - 2 beacons	100 - 240V AC	10,2 kg	2A2202
SL-125-B3J 24V - 2 beacons + junction box	12 - 48V DC	15 kg	2A2203
SL-125-B3J 220V - 2 beacons + junction box	100 - 240V AC	15 kg	2A2204
SL-125-B30 24V - 3 beacons	12 - 48V DC	15 kg	2A2205
SL-125-B30 220V - 3 beacons	100 - 240V AC	15 kg	2A2206
SL-125-C4J 24V - 3 beacons + junction box	12 - 48V DC	20 kg	2A2207
SL-125-C4J 220V - 3 beacons + junction box	100 - 240V AC	20 kg	2A2208
SL-125-C40 24V - 4 beacons	12 - 48V DC	20 kg	2A2209
SL-125-C40 220V - 4 beacons	100 - 240V AC	20 kg	2A2210
SL-125-D5J 24V - 4 beacons + junction box	12 - 48V DC	24,5 kg	2A2211
SL-125-D5J 220V - 4 beacons + junction box	100 - 240V AC	24,5 kg	2A2212
Lens colour: Red, Amber, Blue, Green, Clear			

TECHNICAL SPECIFICATIONS		
Marking:	(1) II 2G Ex d IIC T4T6 Gb (1) II 2D Ex tb IIIC T135°CT85°C	
Certificate:	EU-Type Examination Certificate	
Operating mode:	Steady, rotary, fixed or blinking	
Housing:	ENCLOSURE & FRAME: Stainless Steel 316. LENS: Tempered borosilicate glass 3.3	
Housing colour:	Black (RAL 9004)   Red (RAL 3001)   Yellow (RAL 1018)   Blue (RAL 5005)	
Power:	LED 10W	
Light intensity:	312 Cd	
Operating temperature:	-40°C to +70°C	
Ingress protection:	IP66/67	
Cable entries:	3xM20x1,5 holes	





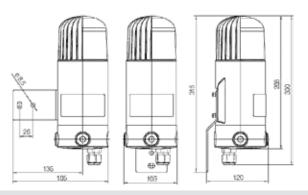
Robust, flameproof optical signalling LED technology device of Device Group II and III for use in explosive atmospheres, zones 1 and 2 or zones 21 and 22.

The available operating modes are Continuous light, Strobe light, Blinking light and Rotating light, and turning on the supply voltage activates the device.



	ITEM REFERENCES	
Designation:	Power consumption:	Item No.:
Expertline LED, 24VDC, White	1280 mA	2A1701
Expertline LED, 24VDC, Red	850 mA	2A1702
Expertline LED, 24VDC, Yellow	900 mA	2A1703
Expertline LED, 24VDC, Green	1200 mA	2A1704
Expertline LED, 24VDC, Blue	1250 mA	2A1705
Expertline LED, 230VAC, White	55 mA	2A1706
Expertline LED, 230VAC, Red	47 mA	2A1707
Expertline LED, 230VAC, Yellow	47 mA	2A1708
Expertline LED, 230VAC, Green	55 mA	2A1709
Expertline LED, 230VAC, Blue	55 mA	2A1710

TECHNICAL SPECIFICATIONS	
Marking:	Il 2G Ex e mb [ib]   IIC T4
Certificate:	EU-Type Examination Certificate
Operating conditions:	Indoor / Outdoor
Housing:	Polycarbonate with stainless steel wall bracket
Ingress protection:	IP66
Weight:	Approx. 2,5 kg
Operating temperature:	-20°C to +65°C / 24VDC -20°C to +60°C / 230 VAC
Cable entries:	1xM20x1.5   2x blind plugs M20x1.5



### ATEX VISUAL SIGNALLING DEVICES ZONES 1, 2 (gas)

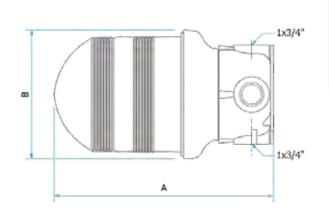


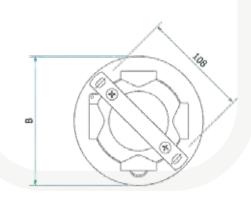
The OL-LPA serie of lighting fixtures are used to signal obstructions and are particularly suitable for use on towers or chimneys and high buildings.



	ITEM REFERENCES	
Designation:	LED Lamp:	Item No.:
OL-LPA RED	E27- ±8W - 230 VAC	2A2601

TECHNICAL SPECIFICATIONS	
Marking:	€ II 2G Ex d IIC T5 Gb
Certificate:	EU-Type Examination Certificate
Operating temperature:	-20°C to +40°C
Ingress protection:	IP65
Operating mode:	Continuous
Body and cover:	Low cooper content Aluminium Alloy
Globe:	Shock and temperature resistant borosilicate glass
Fresnel lens:	Shock and UV resistant Polycarbonate
Gasket:	Acid/Hidrocarbon resistant Silicone
Bolt and screws:	ST.ST.A2
Housing finish:	Epoxy coating. RAL 7000 (Grey)
Power supply:	230VAC
Frequency:	50/60 Hz
Lamp holder:	E27 - Direct connection to lamp holder
Cable entries:	2x 3/4" NPT (cable glands not included)







The signal lamp type AB1-M3 reliably indicates signal status on machines and systems in hazardous areas in zone 1/2 and zone 21/22.

The high degree of IP protection and the corrosion resistant stainless steel housing guarantee a long service life, even under aggressive environmental conditions.



Due to the flat design and rounded edges, the signal lamp offers little surface for external damage and dirt deposits.

ITEM REFERENCES			
Designation:	Color:	Cable lenght:	Item No.:
AB1-M3-R0-1	Red		3A0101
AB1-M3-Y0-1	Yellow		3A0102
AB1-M3-G0-1	Green		3A0103
AB1-M3-W0-1	White	1,5m	3A0104
AB1-M3-B0-1	Blue		3A0105
AB1-M3-RG-1	Red/Green		3A0106
AB1-M3-R0-2	Red		3A0201
AB1-M3-Y0-2	Yellow		3A0202
AB1-M3-G0-2	Green	2	3A0203
AB1-M3-W0-2	White	3m	3A0204
AB1-M3-B0-2	Blue		3A0205
AB1-M3-RG-2	Red/Green		3A0206
AB1-M3-R0-3	Red	3A0301 3A0302 3A0303 5m 3A0304 3A0305 3A0306	3A0301
AB1-M3-Y0-3	Yellow		3A0302
AB1-M3-G0-3	Green		3A0303
AB1-M3-W0-3	White		3A0304
AB1-M3-B0-3	Blue		3A0305
AB1-M3-RG-3	Red/Green		3A0306
AB1-M3-R0-4	Red		3A0401
AB1-M3-Y0-4	Yellow	3A040	3A0402
AB1-M3-G0-4	Green		3A0403
AB1-M3-W0-4	White		3A0404
AB1-M3-B0-4	Blue		3A0405
AB1-M3-RG-4	Red/Green		3A0406

CONNECT and ACT - Due to the approval as a device, the signal lamp can be installed in the front of a machine in the Ex zone without further certification. The low installation depth enables a particularly space-saving use.

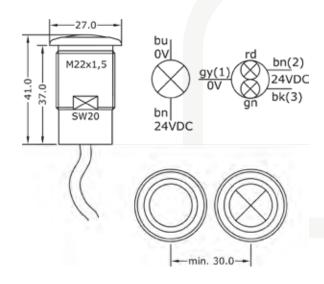
The indicator light has also been tested in order to be installed in certified control panels of types of protection Ex e and Ex t.







TECHNICAL SPECIFICATIONS	
Marking:	II 2G Ex db eb IIC T6 Gb II 2D Ex tb IIIC T85°C Db
Certificate:	EU-Type Examination Certificate
Operating temperature:	-20°C to +60°C
Operating voltage:	24 V DC +-10 %
Current consumption:	max. 15 mA
Fuse:	63 mA
Flying lead:	3 x 0.5 mm <sup>2</sup> Ø 5.1 mm
Electrical connection:	(1) Grey = 0 V (2) Brown = 24 V DC red (3) Black = 24 V DC gn
Material housing:	Stainless steel 1.4305
Material lens:	Polycarbonate
Sealing:	EPDM
Ingress protection:	IP65
Impact resistance:	7 Nm / 4 Nm (lens)
Mounting hole:	22.0 22.3 mm / M22 x 1.5
Torque:	8 Nm
For housing thickness:	1.0 15.0 mm
Weight:	100 gr (1.5 m)
Scope of delivery:	Includes a plastic lock nut





The explosion proof LR4 and LR6 signal towers are expandable up to five LED segments that will not come off due to vibration. The ultra bright, maintenance free LED units have a vertically and horizontally ground lens combined with a double reflection sys tem. This guarantees an even and brilliant light output, and also makes them visible from greater distances.

The polycarbonate lenses and enclosure are dust and waterproof, and can withstand harsh conditions. Also available with fully enclosed sound module and blinker option to provide an audible and visual alarm.



**Declaration of Conformity** 

The LR4 and LR6 signal towers are explosion proof and certified in accordance with European Directive 2014/34/EU and are CE marked.

- Includes stainless steel bracket for wall mounting
- Available with or without buzzer sound and blinker option
- Up to 5 LED units

ITEM REFERENCES LR4 (Ø40 mm)		
Designation:	Combination:	Item No.:
LR4-102WJBU-R-EX	One LED unit, red, with buzzer	3C0701
LR4-102WJNU-R-EX	One LED unit, red, without buzzer	3C0702
LR4-202WJBU-RG-EX	Two LED units, red and green, with buzzer	3C0703
LR4-202WJBU-RY-EX	Two LED units, red and yellow, with buzzer	3C0704
LR4-202WJNU-RG-EX	Two LED units, red and green, without buzzer	3C0705
LR4-202WJNU-RY-EX	Two LED units, red and yellow, without buzzer	3C0706
LR4-302WJBU-RYG-EX	Three LED units, red, yellow and green, with buzzer	3C0707
LR4-302WJNU-RYG-EX	Three LED units, red, yellow and green, without buzzer	3C0708
LR4-402WJBU-RYGB-EX	Four LED units, red, yellow, green and blue, with buzzer	3C0709
LR4-402WJNU-RYGB-EX	Four LED units, red, yellow, green and blue, without buzzer	3C0710
LR4-502WJBU-RYGBC-EX	Five LED units, red, yellow, green, blue and white, with buzzer	3C0711
LR4-502WJNU-RYGBC-EX	Five LED units, red, yellow, green, blue and white, without buzzer	3C0712

ITEM REFERENCES LR6 (Ø60 mm)		
Designation:	Combination:	Item No.:
LR6-102WJBU-R-EX	One LED unit, red, with buzzer	3C0801
LR6-102WJNU-R-EX	One LED unit, red, without buzzer	3C0802
LR6-202WJBU-RG-EX	Two LED units, red and green, with buzzer	3C0803
LR6-202WJBU-RY-EX	Two LED units, red and yellow, with buzzer	3C0804
LR6-202WJNU-RG-EX	Two LED units, red and green, without buzzer	3C0805
LR6-202WJNU-RY-EX	Two LED units, red and yellow, without buzzer	3C0806
LR6-302WJBU-RYG-EX	Three LED units, red, yellow and green, with buzzer	3C0807
LR6-302WJNU-RYG-EX	Three LED units, red, yellow and green, without buzzer	3C0808
LR6-402WJBU-RYGB-EX	Four LED units, red, yellow, green and blue, with buzzer	3C0809
LR6-402WJNU-RYGB-EX	Four LED units, red, yellow, green and blue, without buzzer	3C0810
LR6-502WJBU-RYGBC-EX	Five LED units, red, yellow, green, blue and white, with buzzer	3C0811
LR6-502WJNU-RYGBC-EX	Five LED units, red, yellow, green, blue and white, without buzzer	3C0812

TECHNICAL SPECIFICATIONS		
Marking:	<ul> <li>II 3G Ex ec IIC T4 Gc</li> <li>II 3D Ex tc IIIC T80° Dc</li> </ul>	
Certificate:	Declaration of Conformity	
Light color:	Red, Yellow, Green, Blue and White	
Supply voltage:	24 VDC	
Rated current at 24 VDC:	LR4: 135 mA without buzzer / 385 mA with buzzer   LR6: 225 mA without buzzer / 475 mA with buzzer	
Enclosure:	Plastic	
Dimensions enclosure:	LR4: Ø40mm   LR6: Ø60mm	
Ingress protection:	IP65	
Connection:	Fixed cable	
Mounting bracket:	Stainless steel	
Ambient temperature:	-20 °C to +50 °C	
Blink rate:	±60 / min	

The Multicolour Light GH5 is designed as a fixed device of equipment group II category 3 for use in areas that can rarely and at short notice be endangered by an explosive atmosphere (zones 2, 22).

The light is an optical signalling device for universal use. The possible signalling colours red, yellow, green, blue and white serve many different signalling functions. The different signalling colours are generated in one single light element.

Every colour allows presetting one of the operating modes: continuous light, signalling light or flash light.





- The plastic enclosure and the cap consist of impact resistant polycarbonate.
- The device may be placed in any position. The mounting angle can be rotated 90°.
- 3 signal modes: Continuous light Blinking light Strobe light







	ITEM REFERENCES					
	Designation:	Operating range:	Power:	Item No.:		
	GH5 - 230V	230 VAC, 50/60 Hz	< 12 W	2A1401		
	GH5 - 24V 24 VDC		< 4 W	2A1502		

TECHNICAL SPECIFICATIONS				
Marking:	II 3G Ex nR IIC T6 Gc			
Certificate:	Declaration of Conformity			
Operating conditions:	Indoor / Outdoor			
Housing / Cap:	Polycarbonate			
Ingress protection:	IP66			
Operating temperature:	-20°C to +50°C			
Current consumption (white colour):	230V - < 50 mA	24V - < 135 mA		
Connection:	Terminals 2,5 mm²			
Connection cable:	Ø 7 to 12 mm			
Colour:	5 different signalling colours			
Weight:	Approx. 1,4 kg			
Cable entries:	1xM20x1,5 plastic cable glan	d		

<sup>\*</sup> The measurement has been done at the side and at the top using the valuation method Blondel-Rey.

,				
CAND	DELA*			
Colour: Green				
Continuous light	1.5 cd			
Flashing	0.4 cd			
Blinking	0.8 cd			
Colour: Blue				
Continuous light	0.5 cd			
Flashing	0.1 cd			
Blinking	0.3 cd			
Colour: Yellow				
Continuous light	2.3 cd			
Flashing	0.5 cd			
Blinking	1.3 cd			
Colour: Red				
Continuous light	1.2 cd			
Flashing	0.3 cd			
Blinking	0.6 cd			
Colour: White				
Continuous light	4.0 cd			
Flashing	0.5 cd			
Blinking	1.2 cd			



In potential explosive atmospheres it is often necessary to use optical signals for warning, indicating and signalling purposes. The Ex-Strobe light BZ2/BD22 offers these signalling

The BZ2/BD22 Strobe Light is activated by connecting the supply voltage. It may be delivered with 5 different dome colours.

The sturdy housing made of impact-resistant polycarbonate is realized in protection class IP66 and allows for indoor and outdoor applications. The dome consists of impact-resistant coloured polycarbonate.

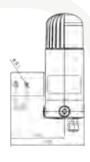
A powerful Xenon flash tube transforms the electrical energy stored in the flash capacitor into light flashes with a high degree of efficiency.

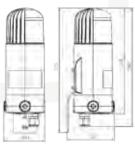
- Dome cap available in 5 differents colors.
- Stainless steel wall bracket.
- -Operating position: Any The mounting angle can be rotated 90°.
- Operating mode: Continuous operation



ITEM REFERENCES						
Designation:	Operating range:	Current consumption:	Temperature class / Operating temperature:	Item No.:		
BZ2/BD22 230 Red	230 VAC, 50-60 Hz +6/-10%	0,13 A	T4 / -20°C ≤ Ta ≤ +40°C	2A0601		
BZ2/BD22 230 Green	230 VAC, 50-60 Hz +6/-10%	0,13 A	T4 / -20°C ≤ Ta ≤ +40°C	2A0602		
BZ2/BD22 230 Blue	230 VAC, 50-60 Hz +6/-10%	0,13 A	T4 / -20°C ≤ Ta ≤ +40°C	2A0603		
BZ2/BD22 230 Transparent	230 VAC, 50-60 Hz +6/-10%	0,13 A	T4 / -20°C ≤ Ta ≤ +40°C	2A0604		
BZ2/BD22 230 Amber	230 VAC, 50-60 Hz +6/-10%	0,13 A	T4 / -20°C ≤ Ta ≤ +40°C	2A0605		
BZ2/BD22 24 Red	24 VDC 15-32 V	0,55 A	T5 / -20°C ≤ Ta ≤ +50°C	2A0801		
BZ2/BD22 24 Green	24 VDC 15-32 V	0,55 A	T5 / -20°C ≤ Ta ≤ +50°C	2A0802		
BZ2/BD22 24 Blue	24 VDC 15-32 V	0,55 A	T5 / -20°C ≤ Ta ≤ +50°C	2A0803		
BZ2/BD22 24 Transparent	24 VDC 15-32 V	0,55 A	T5 / -20°C ≤ Ta ≤ +50°C	2A0804		
BZ2/BD22 24 Amber	24 VDC 15-32 V	0,55 A	T5 / -20°C ≤ Ta ≤ +50°C	2A0805		

TECHNICAL SPECIFICATIONS					
Marking:	II 3G Ex nR IIC T5/T4 Gc II 3D Ex tc IIIC T85°C Dc				
Certificate:	Declaration of Conformity				
Operating conditions:	Indoor / Outdoor				
Housing:	Polycarbonate (black)				
Cap:	Polycarbonate (transparent, red, green, blue, amber)				
Ingress protection: IP66					
Flash energy:	15 J - XENON lamp				
Flash frequency:	60/min				
Connection:	Terminals 2,5 mm <sup>2</sup>				
Weight: Approx. 1,4 kg					
Cable entries:	3xM20x1,5 1 plastic cable gland 2 plastic plugs				





The AR-047 omnidirectional explosion-safe LED signal light is designed for use under the most demanding conditions. The robust anodized aluminum housing and top plate, the 20 mm thick impact-resistant window, the O-ring seal and cast electronics ensure that the lamp is completely impervious to water and salt.

The 15 latest generation LEDs ensure a clearly perceptible visual signal. Dependent on the execution, the light will burn continuously or it blinks at a frequency of 1 Hertz. The signal light can be ordered either with a radial cable connection or with a connection on the back of the lamp.

This makes the lamp highly suitable for use as a warning light on control cabinets.

The connection cable has a standard length of 5 meters. For application under more demanding conditions there is also a version available with an AISI 316 stainless steel housing and top plate.









**Declaration of Conformity** 

ITEM REFERENCES					
Designation:	Light color:	Lighting mode:	Connection:	Item No.:	
AR-047 / 0 1 1 - R	Red	Continuous	3-wire connection	2A2301	
AR-047 / 0 2 1 - R	Red	Blinking (1 Hertz)	3-wire connection	2A2302	
AR-047 / 0 3 1 - R	Red	Continuous or Blinking, user selectable	4-wire connection	2A2303	
AR-047 / 0 1 1 - Y	Yellow / Amber	Continuous	3-wire connection	2A2304	
AR-047 / 0 2 1 - Y	Yellow / Amber	Blinking (1 Hertz)	3-wire connection	2A2305	
AR-047 / 0 3 1 - Y	Yellow / Amber	Continuous or Blinking, user selectable	4-wire connection	2A2306	
AR-047 / 0 1 1 - G	Green	Continuous	3-wire connection	2A2307	
AR-047 / 0 2 1 - G	Green	Blinking (1 Hertz)	3-wire connection	2A2308	
AR-047 / 0 3 1 - G	Green	Continuous or Blinking, user selectable	4-wire connection	2A2309	

	TECHNICAL SPECIFICATIONS			
Marking:	<ul> <li>II 3G Ex ec IIC T4 Gc</li> <li>II 3D Ex tc IIIC T135° Dc</li> </ul>			
Certificate:	Declaration of Conformity			
Light color:	Red (625 nm), Yellow / Amber (610 nm) or Green (530 nm)			
Luminance:	Red: 4.250 Cd/m <sup>2</sup>   Yellow / Amber: 6.350 Cd/m <sup>2</sup>   Green: 8.300 Cd/m <sup>2</sup>			
Material:	Anodized aluminum housing (AISI 316 stainless steel on request), 20 mm impact-resistant window (PMMA)			
Ingress protection: IP65 according to EN 60529				
Supply voltage: 24 VDC ± 10%				
Nominal current:	160 mA @ 24 VDC			
Connection:	Radial: Fixed cable, 3 x 1 mm² or 4 x 1 mm², length 5 m   (Axial: On request)			
Earth connection:	External, stainless steel, 4 mm <sup>2</sup>			
Ambient temperature:	-20 °C to +60 °C			
Dimensions:	Ø 95 x 52 mm (excl. cable gland)			
Assembly:	M5 tapped holes (3x) on an 81 mm pitch circle diameter			
Weight:	575 gr (aluminum) / 1.395 gr (stainless steel)			



### **ZONES 1, 2 (gas) & 21, 22 (dust)**

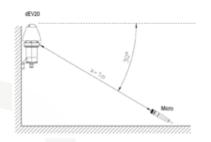


Hazardous areas often require the use of acoustical signals for warning or information purposes. The ExII-sounder dEV20 offers both of these signalling features and is designed

The ExII-sounder dEV20 has an ingress protection rating of IP66, meaning it is suitable for both indoor and outdoor installation. The ExII-Sounder consists of a flame-proof housing manufactured from a light grade aluminium alloy and a sound channel made from impact-resistant polyester.

The sounder dEV20 includes two signal levels. The signal tone for the first level is adjusted with the slide switches 1-5 (S0) according to the signal choice list. The signal tone for the second signal level is adjusted with the slide switches 6-10 (S1).

Delivery condition: S0 = Tone 24, S1 = Tone 4

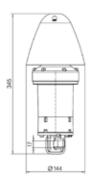


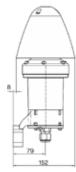


**EU-Type Examination Certificate** 

ITEM REFERENCES						
Designation:	Input voltage:	Current consumption:	Item No.:			
dEV20 VDC	19.2-28.8 VDC	460 mA	3A0901			
dEV20 VAC	85-264 VAC	93 mA (230 V)	3A0902			

TECHNICAL SPECIFICATIONS				
Marking:	II 2G Ex d e IIB + H2 T6 Gb II 2D Ex tb IIIC T85°C Db			
Certificate:	EU-Type Examination Certificate			
Operating temperature:	-50 °C to +60 °C			
Operating conditions:	Indoor / Outdoor			
Housing:	Copper-free, seawater-resistant aluminium			
Cap:	Polyamid (black)			
Ingress protection:	IP66 according to IEC 60529			
Weight:	2.8 kg			
Volume:	Max. approx. 115 dB(A), can be lowered in 3 steps of 10 dB			
Signal tones:	32 per signalling stage			
Alarm tone selection:	Via DIP switch			
Current consumption:	93-460 mA (depending on voltage)			
Power consumption:	Max. 14 W			
Operating position:	Vertical, cable gland facing downwards			
Operating mode:	Continuous operation			
Connection terminals:	1,5 mm <sup>2</sup> / 2,5 mm <sup>2</sup> terminals			
Cable entries:	1xM20x1.5 (cable 5.5 to 13 mm)			







**ZONES 1, 2 (gas) & 21, 22 (dust)** 



The mHG 11 Ex Signalling Hooter is designed for warning purposes in potentially explosive areas of zones 1, 2, 21 and 22.

The hooter is available with the common supply voltages and produces a sound level of approx. 108 dB(A).

The device is driven by a powerful, non-polarized electromagnet with an adjustable tappet that hits the membrane 100 to 120 times per second.

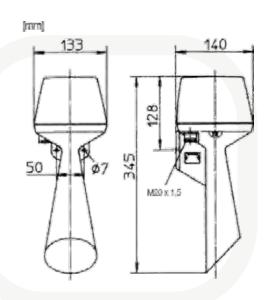
The DC version additionally comprises an electronic circuit breaker.

Volume: Approx. 108 dB(A), in 1 m distance.



ITEM REFERENCES					
Designation:	Designation: Operating range: Current consumption: Temperature range:				
mHG11	T4, 230 VAC	0,07 A	-55°C to +70°C	3A0601	
mHG11	T5, 230 VAC	0,07 A	-55°C to +50°C	3A0602	
mHG11	T4, 24 VDC	0,3 A	-55°C to+70°C	3A0605	
mHG11	T5, 24 VDC	0,3 A	-55°C to +60°C	3A0606	

TECHNICAL SPECIFICATIONS				
Marking:	<ul> <li>II 2G Ex e mb IIC T4 Gb</li> <li>II 2G Ex e mb IIC T5 Gb</li> <li>II 2D Ex tb IIIC T90°C Db</li> </ul>			
Certificate:	EU-Type Examination Certificate			
Operating conditions:	Indoor / Outdoor			
Housing:	Aluminium			
Weight:	Approx. 2 kg			
Ingress protection:	IP66			
Cable entries:	1xM20x1,5			



ZONES 1, 2 (gas)



The mHP 11 Ex Signalling Hooter is designed for warning purposes in potentially explosive areas of zones 1 and 2.

The hooter is available with the common supply voltages and produces a sound level of approx. 108 dB(A).

The device is driven by a powerful, non-polarized electromagnet with an adjustable tappet that hits the membrane 100 to 120 times per second.

The DC version additionally comprises an electronic circuit breaker.

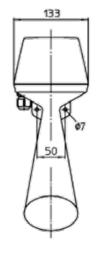


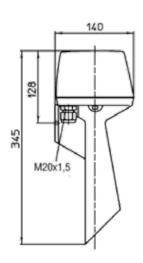


**EU-Type Examination Certificate** 

	ITEM REFERENCES						
Designation: Operating range: Current consumption: Temperature range: Weight: Item No.:							
mHP11	HP11 T5, 230 VAC 0,07 A		-20°C to +50°C	±1.2 kg	3A0502		
mHP11	T5, 24 VDC	0,3 A	-20°C to +60°C	±1.2 kg	3A0506		
mHP11	T5, 115 VAC	0,15 A	20°C to +50°C	±1.2 kg	3A0509		

TECHNICAL SPECIFICATIONS			
Marking:	II 2G Ex e mb IIC T5 Gb		
Certificate:	EU-Type Examination Certificate		
Operating conditions:	Indoor / Outdoor		
Housing:	Black Polycarbonate		
Ingress protection:	IP54		
Cable entries:	1xM20x1,5 Plastic cable gland		





### **ZONES 1, 2 (gas) & 21, 22 (dust)**



SD150-1 Sounder in GRP, certified for use in explosive atmosphere, zone 1 & 2 for gas and zone 21 & 22 for dust. It is dedicated for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

It's designed for corrosive environnements and hazardous area.

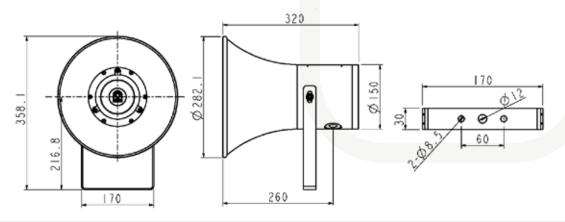
This sounder, according to user control system, can be set with one tone among 59 prerecorded tones.

It is possible to control the sounder via a telephone line.



	ITEM REFERENCES	
Designation:	Voltage:	Item No.:
SD 150-1 12-48 VDC	1248V DC	3C0501
SD 150-1 100-240 VAC	100240V AC (50/60hz)	3C0503

	TECHNICAL SPECIFICATIONS		
Marking:	II 2G Ex d IIC T4~T6 Gb II 2D Ex tb IIIC T135°C~T85°C IP66		
Certificate:	EU-Type Examination Certificate		
Housing:	ENCLOSURE: Glass-Reinforced Polyester (GRP). BRACKET: Stainless Steel 316L		
Housing colour:	Standard: Red (RAL 3001) On request: Black (RAL 9004)   Yellow (RAL 1018)   Blue (RAL 5005)		
Operating temperature:	-40°C to +55°C (T6) / -40°C to +60°C (T5) / -40°C to +70°C (T4)		
Ambient humidity:	Until 95%		
Consumption:	Adjustable from 5 to 25 W (factory setting 20W)		
Noise level:	Until 115 dB at 1 m		
Current consumption:	0.5 to 1 A		
Weight:	5,4 kg		
Ingress protection:	IP66/67		
Cable entries:	2xM20x1,5 holes		



## SD125-1 SOUNDER - STAINLESS STEEL

**ACOUSTIC SIGNALLING DEVICES** 

Zones 1, 2, 21, 22

ZONES 1, 2 (gas) & 21, 22 (dust)



SD125-1 Sounder in stainless steel, certified for use in explosive atmosphere, zone 1 & 2 for gas and zone 21 & 22 for dust. It is dedicated for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

It's designed for corrosive environnements and hazardous area.

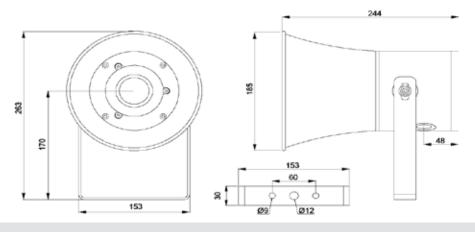
This sounder, according to user control system, can be set with one tone among 59 prerecorded tones.

It is possible to control the sounder via a telephone line.



ITEM REFERENCES			
Designation:	Voltage:	Item No.:	
SD 125-1 12-48 VDC	1248V DC	3C0504	
SD 125-1 100-240 VAC	100240V AC (50/60hz)	3C0506	

TECHNICAL SPECIFICATIONS		
Marking:	2G Ex d       C T4~T6 Gb	
Certificate:	EU-Type Examination Certificate	
Housing:	ENCLOSURE & BRACKET: Stainless Steel 316L	
Housing colour:	Standard: Red (RAL 3001) On request: Black (RAL 9004)   Yellow (RAL 1018)   Blue (RAL 5005)	
Operating temperature:	-40°C to +55°C (T6) / -40°C to +60°C (T5) / -40°C to +70°C (T4)	
Ambient humidity:	Until 95%	
Consumption:	Adjustable from 5 to 25 W (factory setting 20W)	
Noise level:	Until 115 dB at 1 m	
Current consumption:	0.5 to 1 A	
Weight:	6,2 kg	
Ingress protection:	IP66/67	
Cable entries:	2xM20x1,5 holes	



ZONES 1, 2 (gas) & 21, 22 (dust)

ETH20MD audible warning devices are for use in open environments with a high background noise, where there is a potential explosive atmosphere. They are equipped with a electronic circuit with 32 tones and increased sound power, selectable using a deep-switch.



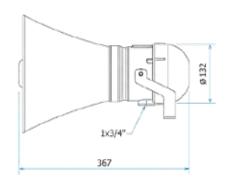
The acoustic transducer has a impedence of 16  $\Omega$  and a frequency 2 KHz. The mounting bracket is made of ST. ST. 316L.

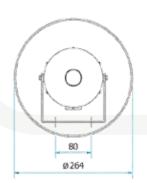
The body of the horn has to be taken into consideration when placing it. It has to be floating, to make room for the cable gland.



ITEM REFERENCES				
Designation:	Voltage:	Working current:	Weight:	Item No.:
ETH20MD101	12 - 24 V AC/DC	0,10-0,12 A	3,10 kg	3B0201
ETH20MD103	110 V AC	0,02 A	3,25 kg	3B0202
ETH20MD104	230 V AC	0,012 A	3,25 kg	3B0203

	TECHNICAL SPECIFICATIONS	
Marking:	II 2G Ex d IIC or IIB+H <sub>2</sub> T3 or T4 Gb II 2D Ex tb IIIC T150°C or T130°C Db	
Certificate:	EU-Type Examination Certificate	
Operating temperature:	-50°C to +60°C	
Body and cover:	Low copper aluminium alloy. Epoxy coating RAL 7000	
Speaker horn:	Anodized aluminium	
Gasket:	Acid/hidrocarbon resistant silicone	
Bolt and screws:	ST. ST. A2	
Noise level:	113 dB	
Acoustic frequency:	340/2000 Hz	
Power consumption:	10 W	
Frequency:	50/60 Hz	
Driver impedance:	16 Ω	
Operating mode:	Continuous	
Ingress protection:	IP66	
Cable entries:	1x3/4"NPT (cable gland not included)	





ZONES 1, 2 (gas)



The dGH21/dRGH21 Signalling Hooter was designed for warning, calling and indicating purposes in potentially explosive areas of group II and and for rough ambient conditions.

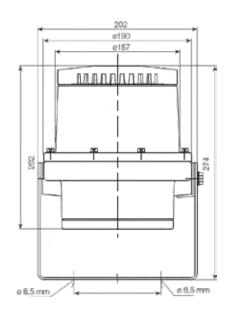
The signalling hooter produces a sound level of approx. 105 dB(A) at 1 m distance. The characteristic hooting sound clearly stands out from any ambient sound of higher frequency.



The hooter is available for all common supply voltages. The dRGH21 version comprises a call current relay and issues the signals in the pulse rate of the incoming telephone call.

		ITEM REFERENCES		
Designation:	Operating range:	Current consumption:	Temperature range:	Item No.:
dGH21	230 VAC	0,07 A		3B0101
dGH21	24 VDC	0,3 A	T5) -20°C to +75°C	3B0102
dGH21	110 VDC	0,08 A	T6) -20°C to +70°C	3B0103
dGH21	120 VAC 60 Hz	0,15 A		3B0104

TECHNICAL SPECIFICATIONS			
Marking:	II 2G Ex de IIC T6/T5 Gb		
Certificate:	EU-Type Examination Certificate		
Operating conditions:	Indoor / Outdoor		
Housing:	GRP		
Weight:	Approx. 5,5 kg		
Ingress protection:	IP66		
Cable entries:	1xM20x1,5 Plastic cable gland 1xM20x1,5 Plastic plug		



ZONES 1, 2 (gas)



The mHP 12 Ex Signalling Hooter is designed for warning purposes in potentially explosive areas of zones 1 and 2.

The hooter is available with the common supply voltages and produces a sound level of approx. 108 dB(A).

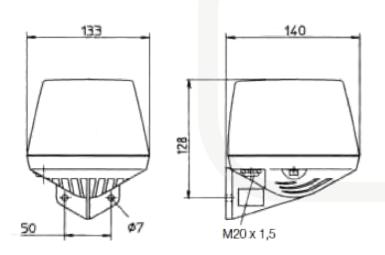
The device is driven by a powerful, non-polarized electromagnet with an adjustable tappet that hits the membrane 100 to 120 times per second.

Volume: approx. 108 dB(A).



		ITEM REFERENCES		
Designation:	Operating range:	Current consumption:	Temperature range:	Item No.:
mHP12	T4, 230 VAC	0,07 A	-20°C to +70°C	3A0801
mHP12	T4, 24 VDC	0,3 A	-20°C to +70°C	3A0805

TECHNICAL SPECIFICATIONS			
Marking:	€ II 2G Ex e mb II T4 Gb		
Certificate:	EU-Type Examination Certificate		
Operating conditions:	Indoor / Outdoor		
Housing:	Polycarbonate (Black)		
Weight:	Approx. 2 kg		
Ingress protection:	IP54		
Cable entries:	1xM20x1,5 plastic cable gland		



ZONES 1, 2 (gas)



The signalling bell dGW21 was designed to warn, call and signal in areas with explosive atmospheres in group II and rough ambient conditions. The protection type II 2G Ex de IIC T6 allows the signalling bell to be used without restriction in all ex-areas classified 1 and 2.

The signalling bell produces a sound volume of approx. 105dB(A) at 1m distance.

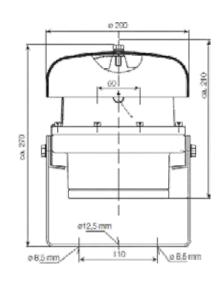
The emphasis of the ringing lies at approx. 1000 Hz, as a result of which the signal stands out clearly against lower-frequency ambient noises. The bell is available for all usual supply voltages.

The version dRGW 21 emits the signals in time with the connected telephone



ITEM REFERENCES				
Designation:	Item No.:			
dGW 21 black	12 VDC	3E0101		
dGW 21 black	24VDC	3E0102		
dGW 21 black	110 VAC	3E0103		
dGW 21 black	110 VDC	3E0104		
dGW 21 black	230 VAC	3E0105		
dGW 21 black	240 VAC 60 Hz	3E0106		
dGW 21 red	12 VDC	3E0107		
dGW 21 red	24 VDC	3E0108		
dGW 21 red	110 VAC	3E0109		
dGW 21 red	110 VDC	3E0110		
dGW 21 red	230 VAC	3E0111		

TECHNICAL SPECIFICATIONS		
Marking:	🔃 II 2G Ex de IIC T6 Gb	
Certificate:	EU-Type Examination Certificate	
Operating conditions:	Indoor / Outdoor	
Ingress protection:	IP66	
Weight:	Approx. 5,5 kg	
Operating temperature:	-20°C to +40°C	
Operating mode:	Continuous	
Cable entries:	1xM20x1,5 plastic cable gland	



### **ZONES 0, 1, 2 (gas) & 20, 21, 22 (dust)**



The IS-S-02 Intrinsically Safe Sounder is ATEX and IECEx certified, and is approved to be installed in Groups I (Mining) and Group II (above ground), Zones 0, 1 or 2 with gas groups IIA, IIB, IIC and Zones 20, 21 and 22 for dust groups IIIC and carries a temperature classification of T6.

The sounder unit incorporates a 2 stage alarm option and has a total of 32 selectable tones, selectable via a dip switch on the PCB and produces up to 105dB at 1m.





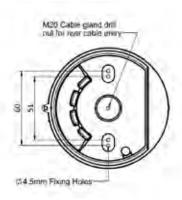


**EU-Type Examination Certificate** 

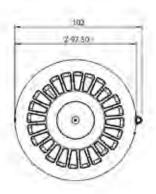
This unit must be used in conjunction with an approved Zener Barrier or Galvanic Isolator.

ITEM REFERENCES				
Designation:	Voltage:	Current:	Tones:	Item No.:
IS-S-02	24 V DC	33 mA	32	3C0901
ZENER Z728	1 Stage		3C0901A	
KFD0-SD2-Ex2.1045	2 Stages		3C0901B	

TECHNICAL SPECIFICATIONS IS-S Series		
Marking:	I MI Ex ia I Ma  II 1G Ex ia IIC T6 Ga  II 1D Ex ia IIIC T85°C Da	
Certificate:	EU-Type Examination Certificate	
Material:	Flame Retardant Polycarbonate UL94 V2	
Colour:	RED	
Sounder:	2 Stage alarm with 32 Selectable tones	
Power rating:	0.66 W via a suitable barrier	
Sound output:	Up to 105 dB at 1m (Tone 18)	
Ingress protection:	IP66	
Weight:	0,33 kg	
Dimensions:	104 x 97.5 mm	
Operating temperature:	-40°C to +55°C	
Humidity:	>90% at 20°C	
Connection terminals:	0.55mm² up to 2.5mm²	
Power supply:	The unit must be powered via an approved Zener Barrier or Galvanic Isolator whose characteristics do not exceed U <sub>o</sub> : 28v, I <sub>o</sub> : 93mA, P <sub>o</sub> : 660mW, C <sub>i</sub> : 0, L <sub>i</sub> . 0. The minimum value of U <sub>o</sub> should not drop below 23.6v and the minimum value of Io should not drop below 50mA.	
Cable entries:	3xM20x1,5 (cable glands not included)	







# IS-S-02 INTRINSICALLY SAFE SOUNDER Zones 0, 1, 2, 20, 21, 22

Full catalogue available on our website: www.inpratex.com

TECHNICAL SPECIFICATIONS Z728		
Marking:	I (M1) [Ex ia Ma] I II (1)G [Ex ia Ga] IIC II (1)D [Ex ia Da] IIIC	
Certificate:	EU-Type Examination Certificate	
Nominal resistance:	D300 Ω	
Series resistance:	max. 327 Ω	
Fuse rating:	50 mA	
Working voltage - Supply loop:	max. 26.9 V	
Ambient temperature:	-20°C 60 °C	
Mechanical specifications		
Degree of protection:	IP20	
Connection:	Screw terminals	
Weight:	approx. 150 g	
Dimensions:	12,5 x 115 x 116 mm	
Mounting:	On 35 mm DIN mounting rail acc. to EN 60715:2001	
Data for application in connection with hazardous areas		
Voltage:	U <sub>o</sub> 28 V	
Current:	I <sub>.</sub> 93 mA	
Power:	P <sub>o</sub> 650 mW	
Input maximum safe voltage:	U <sub>m</sub> 250 V	

TECHNICAL SPECIFICATIONS KFDO-SD2-Ex2.1045		
Marking:	I (M1) [Ex ia Ma] I II (1)G [Ex ia Ga] IIC II (1)D [Ex ia Da] IIIC	
Certificate:	EU-Type Examination Certificate	
Signal type:	Digital Output	
Safety Integrity Level (SIL):	SIL 3	
Supply rated voltage:	U <sub>r</sub> 20 35 V DC loop powered	
Supply power dissipation:	< 1.05 W (≤ 30 V) per channel	
Ambient temperature:	-20°C 60 °C	
Mechanical specifications		
Degree of protection:	IP20	
Connection:	Screw terminals	
Weight:	approx. 100 g	
Dimensions:	20 x 107 x 115 mm	
Mounting:	On 35 mm DIN mounting rail acc. to EN 60715:2001	
Data for application in connection with hazardous areas		
Voltage:	U <sub>o</sub> 25.2 V	
Current:	I , 93 mA	
Power:	P <sub>o</sub> 590 mW	
Input maximum safe voltage:	U <sub>m</sub> 250 V (Attention! The rated voltage can be lower)	

**ZONES 1, 2 (gas) & 21, 22 (dust)** 



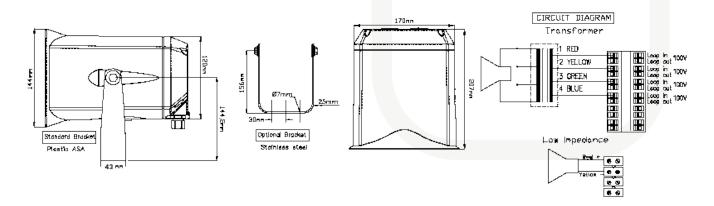
Explosion-proof plastic horn speaker. This versatile model can be ordered with different transformers for more tappings and power

DSP-15 EExmN(T) is light and has M20 entries in the back lid for easy cable mounting. Extra termination space for loop in loop out purpose as standard.



ITEM REFERENCES	
Designation:	Item No.:
DSP-15EExmN(T)	3D0401

TECHNICAL SPECIFICATIONS			
Marking:	II 2G Ex d e mb IIB+H2 T4 Gb II 2G Ex d e mb IIC T4 Gb II 2D Ex tb IIIC T105°		
Certificate:	EU-Type Examination Certificate		
Housing:	Anti-static PA / Black		
Weight:	2,2 kg		
Operating temperature:	-50°C to +60°C		
Ingress protection:	IP66/67		
Rated voltage:	100V		
Rated / max. power:	25W / 30W		
	IIB	IIC	
Sound pressure level:	106 dB - SPL 1W/1m	104 dB - SPL 1W/1m	
Effective freq. range:	380-8000 Hz	450-7000 Hz	
Dispersion:	1 kHz -6dB 120° 4 kHz -6dB 37°	1 kHz -6dB 105° 4 kHz -6dB 35°	
Cable entries:	1xM20x1.5 plastic cable gland 1xM20x1.5 plastic plug		



## **ACOUSTIC SIGNALLING DEVICES**

ZONES 1, 2 (gas)



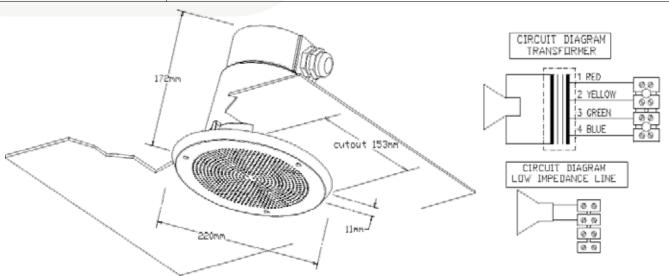
Ex certified ceiling speaker for flush mounting.

An IP-rating of 54, makes the loudspeaker very flexible regarding placement and the sound characteristics ensure high quality sound in any situation.

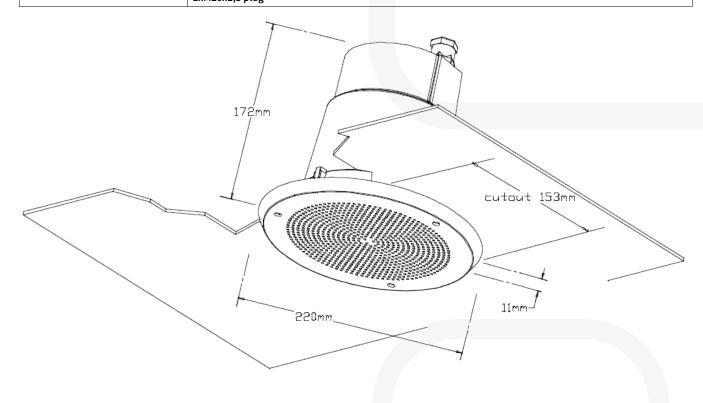


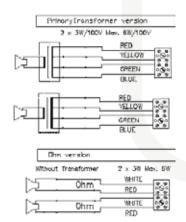
ITEM REFERENCE	S
Designation:	Item No.:
BA-56EExeN(T), 100 V	3D0301
BA-56EExeN(T)x2, 100 V	3D0302
	·

TECHNICAL SPECIFICATIONS BA-56EExeN(T)			
Marking:	€ II 2G Ex de IIB+H2 T6 Gb		
Certificate:	EU-Type Examination Certificate		
Housing:	Aluminium RAL 9010		
Ingress protection:	IP54		
Weight:	3 kg		
Operating temperature:	-20°C to +50°C		
Max. power:	6W		
Sound pressure level:	88 db - SPL 1W/1m		
SPL rated power:	95 db		
Effective freq. range:	160-15000Hz		
Dispersion:	(-6dB) 1kHz / 4 kHz: 113° / 25°		
100V transformer primary nominal tappings:	1:2=6W / 2:3=3W / 3:4=1,5W / 1:3=1W / 2:4=0,5W / 1:4=0,3W		
Cable entries:	1xM20x1,5 cable gland		



TECHNICAL SPECIFICATIONS BA-56EExeN(T)x2			
Marking:	€ II 2G Ex de IIB+H2 T6 Gb		
Certificate:	EU-Type Examination Certificate		
Housing:	Aluminium RAL 9010		
Ingress protection:	IP54		
Weight:	3,1 kg		
Operating temperature:	-20°C to +50°C		
Max. power:	2x3W		
Sound pressure level:	83 db - SPL 1W/1m		
SPL rated power:	87 db		
Effective freq. range:	190-15000Hz		
Dispersion:	(-6dB) 1kHz / 4 kHz: 113° / 40°		
100V transformer primary nominal tappings:	Red:Yellow=3W / Red:Green=1,5W / Red:Blue=0,75W		
Cable entries:	1xM20x1,5 cable gland 1xM20x1,5 plug		





## **ACOUSTIC SIGNALLING DEVICES**

**ZONES 1, 2 (gas) & 21, 22 (dust)** 

The AB1-S3-type ATEX Buzzers stands for alarming, with a penetrating, acoustic signal, to safely indicate possible dangers in potentially explosive areas. The high degree of IP protection and the corrosion-resistant stainless steel housing guarantee a long service life even under aggressive environmental conditions. This buzzer can be used in a variety of ways in potentially explosive areas.

Thanks to its approval as a device, it can be installed directly in the front of a machine without further certification.

It has also been tested in order to be installed in certified control panels of types of protection Ex e, Ex t and Ex d.

A lock nut is included in the scope of delivery.



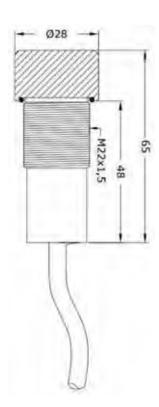






ITEM REFERENCES				
Designation: Cable lenght: Item No.:				
AB1-S3 - 1,5	1,5 m	3D0501		
AB1-S3 - 3	3 m	3D0502		
AB1-S3 - 5	5 m	3D0503		
AB1-S3 - 10	10 m	3D0504		

	TECHNICAL SPECIFICATIONS
	TECHNICAL SPECIFICATIONS
Marking:	II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T80°C Db
Certificate:	EU-Type Examination Certificate
Operating temperature:	-40°C to +60°C
Operating voltage:	24 VDC
Power consumption:	max. 30 mA
Prefuse:	63 mA
Frequency:	4300 Hz
Volume:	85 db approx / 40 cm
Electrical connection:	2x0.5 mm <sup>2</sup> , Ø 4.8 mm. Brown = +24 VDC / Blue = 0 V
Housing:	Stainless steel 1.4305
Sealing:	EPDM
Ingress protection:	IP66 / Head IP30
Mounting hole:	22.0 22.3 mm / M22x1,5
Torque:	8 Nm
Max. wall thickness:	1.0 15.0 mm
Weight:	150 g (1,5 m cable version)





# SECONDARY TELEPHONE ALARM AND SIGNAL UNIT TWIN EEXIL

Zones 1, 2

Full catalogue available on our website: www.inpratex.com

### OPTICAL & ACOUSTIC SIGNALLING

### ZONES 1, 2 (gas)



The TWIN-EExll is specially designed for application in potentially explosive indoor or outdoor industrial areas. It offers two different operating modes that can be selected using the sliding switch.

As secondary telephone alarm the TWIN EExII is used to draw attention to incoming phone calls, which are indicated with high volume and additionally signalled by the integrated strobe light. Both signals are actuated by the AC ringing voltage.

The TWIN-EExll is a compact unit comprising power supply, telephone connection, strobe light, amplifier and loud-speaker. The bottom box is made of seawater-resistant cast aluminium coated with plastic.

The loudspeaker consists of impact and cold-resistant plastic and is permanently mounted to the housing. The strobe light cap made of polycarbonat forms the housing cover.



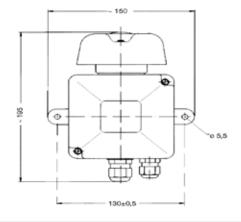


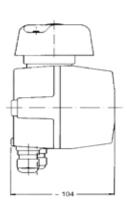


**EU-Type Examination Certificate** 

ITEM REFERENCES			
Model:	Operating range:	Colour:	Item No.:
TWIN-EExII 5842/1	230VAC 50-60 Hz	Clear	2A2001
TWIN-EExII 5842/1	230VAC 50-60 Hz	Red	2A2002
TWIN-EExII 5842/1	230VAC 50-60 Hz	Amber	2A2003
TWIN-EExII 5842/1	230VAC 50-60 Hz	Green	2A2004
TWIN-EExII 5842/1	230VAC 50-60 Hz	Blue	2A2005

TECHNICAL CRECIFICATIONS			
TECHNICAL SPECIFICATIONS			
Marking:	(I) 2G Ex e mb [ib] IIC T6/T5/T4 Gb		
Certificate:	EU-Type Examination Certificate		
Housing:	Die-cast aluminium, cap made of macrolon		
Cover:	Polycarbonate		
Ingress protection:	IP66		
Operating temperature:	-20°C to +40°C		
Telephone connection:	W, Lb   30 VAC 75 VAC /23 Hz 54 Hz / 0 VDC 63 VDC		
Acoustic signalling:	Single-tone call/2-tone call/3-tone call Volume: Approx. 90 dB(A), 1 m distance (Only with 230 V network))		
Optical signalling:	2 flash tubes, ca. 0,9 joule 1 Hz 2 Hz (Only with 230 V network)		
Operating position:	Any (wall or ceiling mounting)		
Weight:	Approx. 1,5 kg		
Cable entries:	1xM20x1.5 cable gland (230 V network)   1xM20x1.5 cable gland (telephone network)		





# OPTICAL & ACOUSTIC SIGNALLING ZONES 1, 2 (gas) & 21, 22 (dust)



This combined product is certified for use in ATEX explosive atmosphere, zone 1 & 2 for gas and zone 21 & 22 for dust. It is dedicated for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

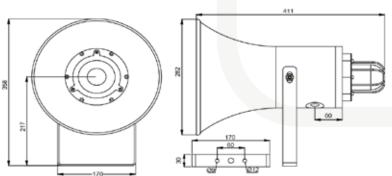
It's designed for corrosive environnements and hazardous area.

This sounder, according to user control system, can be set with one tone among 59 prerecorded tones.



ITEM REFERENCES				
Model:	Power consumption:	Item No.:		
SB 150 12-48 VDC LED 10W Red	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0401		
SB 150 12-48 VDC LED 10W Amber	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0402		
SB 150 12-48 VDC LED 10W Blue	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0403		
SB 150 12-48 VDC LED 10W Green	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0404		
SB 150 12-48 VDC LED 10W Clear	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0405		
SB 150 100-240 VAC LED 10W Red	110VAC-160mA / 220VAC-80mA	3C0406		
SB 150 100-240 VAC LED 10W Amber	110VAC-160mA / 220VAC-80mA	3C0407		
SB 150 100-240 VAC LED 10W Blue	110VAC-160mA / 220VAC-80mA	3C0408		
SB 150 100-240 VAC LED 10W Green	110VAC-160mA / 220VAC-80mA	3C0409		
SB 150 100-240 VAC LED 10W Clear	110VAC-160mA / 220VAC-80mA	3C0410		

TECHNICAL SPECIFICATIONS			
Marking:	1 2G Ex d   1 C T4~T6 Gb   1 2D Ex tb   1   C T135°C~T85°C		
Certificate:	EU-Type Examination Certificate		
Housing:	ENCLOSURE: Glass-Reinforced Polyester (GRP)   LENS: Tempered borosilicate glass 3.3   BRACKET: Stainless steel 316L		
Housing colour:	Standard: Red (RAL 3001) On request: Black (RAL 9004)   Yellow (RAL 1018)   Blue (RAL 5005)		
Operating temperature:	-40°C to +55°C (T6) / -40°C to +60°C (T5) / -40°C to +70°C (T4)		
Light intensity:	312 Cd		
Consumption:	Adjustable from 5 to 25W (factory setting 20W)		
Noise level:	Until 115 dB at 1m		
Current consumption:	0,5 to 1 A		
Weight:	8 kg		
Ingress protection:	IP66/67		
Cable entries:	2xM20x1,5 holes		



# SB125-1 EX SOUNDER / BEACON - STAINLESS STEEL

Zones 1, 2, 21, 22

# OPTICAL & ACOUSTIC SIGNALLING ZONES 1, 2 (gas) & 21, 22 (dust)



This combined product is certified for use in ATEX explosive atmosphere, zone 1 & 2 for gas and zone 21 & 22 for dust. It is dedicated for Oil & Gas, chemical, petrochemical, pharmacy industries, marine and offshore applications.

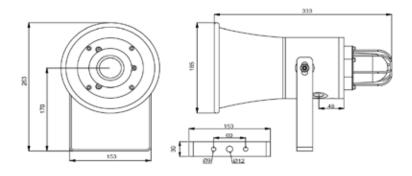
It's designed for corrosive environnements and hazardous area.

This sounder, according to user control system, can be set with one tone among 59 prerecorded tones.



ITEM REFERENCES				
Model:	Item No.:			
SB 125 12-48 VDC LED 10W Red	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0411		
SB 125 12-48 VDC LED 10W Amber	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0412		
SB 125 12-48 VDC LED 10W Blue	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0413		
SB 125 12-48 VDC LED 10W Green	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0414		
SB 125 12-48 VDC LED 10W Clear	12VDC-1100mA / 24VDC-530mA / 48VDC-240 mA	3C0415		
SB 125 100-240 VAC LED 10W Red	110VAC-160mA / 220VAC-80mA	3C0416		
SB 125 100-240 VAC LED 10W Amber	110VAC-160mA / 220VAC-80mA	3C0417		
SB 125 100-240 VAC LED 10W Blue	110VAC-160mA / 220VAC-80mA	3C0418		
SB 125 100-240 VAC LED 10W Green	110VAC-160mA / 220VAC-80mA	3C0419		
SB 125 100-240 VAC LED 10W Clear	110VAC-160mA / 220VAC-80mA	3C0420		

TECHNICAL SPECIFICATIONS			
Marking:	1 2G Ex d   1 C T4~T6 Gb   1 2D Ex tb   1 1 C T135°C~T85°C		
Certificate:	EU-Type Examination Certificate		
Housing:	ENCLOSURE & BRACKET: Stainless steel 316   LENS: Tempered borosilicate glass 3.3		
Housing colour:	Standard: Red (RAL 3001) On request: Black (RAL 9004)   Yellow (RAL 1018)   Blue (RAL 5005)		
Operating temperature:	-40°C to +55°C (T6) / -40°C to +60°C (T5) / -40°C to +70°C (T4)		
Light intensity:	312 Cd		
Consumption:	Adjustable from 5 to 25W (factory setting 20W)		
Noise level:	Until 115 dB at 1m		
Current consumption:	0,5 to 1 A		
Weight:	8 kg		
Ingress protection:	IP66/67		
Cable entries:	2xM20x1,5 holes		



# OPTICAL & ACOUSTIC SIGNALLING ZONES 1, 2 (gas) & 21, 22 (dust)



Optical-acoustic signalling device specially designed to be installed in hazardous areas.

Ultra-bright LED lamp, low power consumption and long service life.

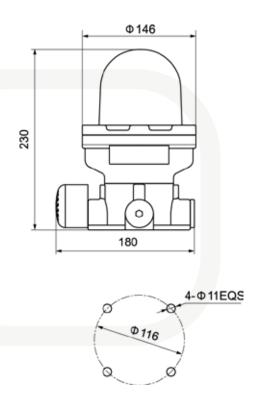
**OPTIONAL: Operating voltage 24 V AC** 





ITEM REFERENCES			
Model:	Lamp colour:	Rated voltage:	Item No.:
BBJ81-R 220	Red	220 - 240V AC   50/60Hz	3C0601
BBJ81-B 220	Blue	220 - 240V AC   50/60Hz	3C0602
BBJ81-Y 220	Yellow	220 - 240V AC   50/60Hz	3C0603
BBJ81-G 220	Green	220 - 240V AC   50/60Hz	3C0604
BBJ81-R 24	Red	24 V DC	3C0605
BBJ81-B 24	Blue	24 V DC	3C0606
BBJ81-Y 24	Yellow	24 V DC	3C0607
BBJ81-G 24	Green	24 V DC	3C0608

TECHNICAL SPECIFICATIONS		
Marking:	II 2G Ex d ib IIC T6 Gb II 2D Ex t IIIC T80°C Db IP66	
Certificate:	EU-Type Examination Certificate	
Housing:	Copper-free aluminium, yellow (RAL 1021)	
Transparent cover:	Toughened glass, stands 4J impact	
Exposed fastener:	Stainless steel	
Weight:	2,60 kg	
Lamp:	LED	
Power:	5 W	
Flash frequency:	150 times/min	
Sound intensity:	100~120 (R=1 m)	
Operating temperature:	-40°C to +55°C	
Ingress protection:	IP66	
Earthing protection:	M5 (internal & external earth bolts)	
Terminals:	3 terminals 1,5~2,5 mm² (L+N+PE)	
Cable entries:	3xM25x1,5 (plugs)	





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