

# Explosion Proof Beacon Range

## ZT-BC150 Ex Beacon / Light



The flameproof ZT-BC150 beacon is ATEX / IECEx Certified for use in potentially explosive atmospheres, helping to signal alarms, alerting personnel to potential dangers, or signal the need for immediate action in emergency situations. The BC150 can also be used as part of a status light array.

**ATEX / IECEx Flameproof Certification:** ATEX Zone 1 and Zone 2 Certified for gas / vapour and Zone 21 and Zone 22 compliant for dust / powder applications.

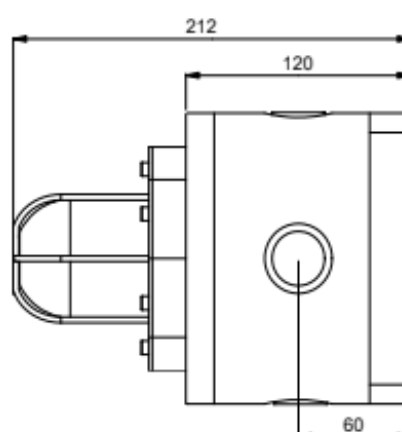
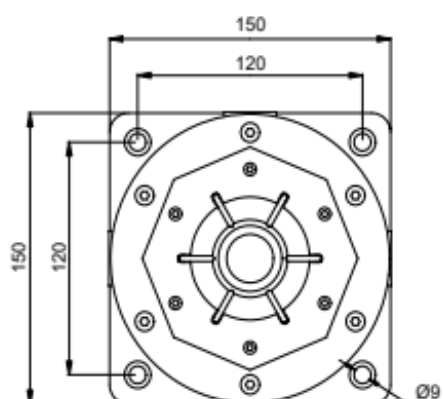
**Application:** Oil and gas, chemical, petrochemical, pharmaceutical, marine and offshore applications

**Key features:** Robust and highly reliable, this Ex beacon is designed for corrosive environments and hazardous areas. Housing is moulded Glass-Reinforced Polyester (GRP), protected by an UV resistant paint. The lens is made of borosilicate glass and is available with a 316L stainless steel lens guard option.

**Options:** This beacon can be delivered with two different light sources:

- LED with steady, rotary or flashing options of different intensity.
- Flashing with XENON tube of different intensity.
- Four flashing frequencies are selectable.

A range of accessories is available to customise this product. These include pipe mounting brackets, sunshades, tag and duty labels and other accessories



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|                                                     |                                                                                                                                                            |                                         |                                                                                                              |               |                |                |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------|----------------|----------------|
| MATERIAL                                            | • <b>Enclosure:</b> Glass-Reinforced Polyester (GRP)                                                                                                       |                                         | • <b>Lens:</b> Tempered borosilicate glass 3.3                                                               |               |                |                |
| HOUSING COLOUR                                      | • RED : RAL3001/3028<br>• BLACK : RAL9005<br>• ORANGE : RAL2010                                                                                            | • YELLOW : RAL1018<br>• GREEN : RAL6032 | • BLUE : RAL5005<br>• GREY : RAL7038                                                                         |               |                |                |
| INGRESS PROTECTION                                  | • IP66/67                                                                                                                                                  |                                         |                                                                                                              |               |                |                |
| AMBIENT TEMPERATURE FOR OPERATION                   | • <b>T6</b> = - 40°C ~ + 55°C , <b>T5</b> = - 40°C ~ + 60°C, <b>T4</b> = - 40°C ~ + 70°C                                                                   |                                         |                                                                                                              |               |                |                |
| CERTIFICATION                                       | • <b>Presafe</b> 16 ATEX 8967X, IECEx PRE 16.0087X                                                                                                         |                                         |                                                                                                              |               |                |                |
| EX CODE                                             | <div><div><div><div></div><div>Ex</div></div></div><div>• II 2 GD Ex db IIC T4 ~ T6 Gb<br/>• Ex tb IIIC T135°C ~T85°C Db</div></div>                       |                                         |                                                                                                              |               |                |                |
| STANDARD                                            | • EN / IEC 60079-0, EN / IEC 60079-1, EN / IEC 60079-31                                                                                                    |                                         |                                                                                                              |               |                |                |
| ATEX AREA ZONE                                      | • <b>Gas zone:</b> 1 & 2 <b>Dust zone:</b> 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                                | • <b>5 joules</b> = 109 Cd<br>• <b>15 joules</b> = 395 Cd                                                                                                  |                                         | • <b>10 joules</b> = 293 Cd<br>• <b>21 joules</b> = 424 Cd<br>• <b>5 W</b> = 128 Cd<br>• <b>10W</b> = 312 Cd |               |                |                |
| PEAK LIGHT INTENSITY                                | • <b>5 joules</b> = 35970 Cd<br>• <b>15 joules</b> = 83345 Cd                                                                                              |                                         | • <b>10 joules</b> = 66804 Cd<br>• <b>21 joules</b> = 95824 Cd                                               |               |                |                |
| LIFETIME                                            | • Emissions are reduced to 70% after 8 million flashes                                                                                                     |                                         | • >50 000 hours without luminosity decreasing                                                                |               |                |                |
| BLINKING OR ROTARY FREQUENCY<br>(0 = steady status) | • 60/80/120 times/min<br>• 100/120/150 times/min<br>• 120/150/180 times/min                                                                                |                                         | • 60/75/0 times/min<br>• 60/75/100 times/min<br>• 75/95/0 times/min<br>• 75/95/120 times/min                 |               |                |                |
| CONSUMPTION                                         | • <b>5 joules</b> = 10W<br>• <b>15 joules</b> = 20W                                                                                                        |                                         | • <b>10 joules</b> = 15W<br>• <b>21 joules</b> = 25W<br>• <b>5W</b><br>• <b>10W</b>                          |               |                |                |
| 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                                 | • <b>Power</b>                                                                                                                                             | <b>12V DC</b>                           | <b>24V DC</b>                                                                                                | <b>48V DC</b> | <b>110V AC</b> | <b>220V AC</b> |
|                                                     | • <b>5W</b>                                                                                                                                                | 530 mA                                  | 260 mA                                                                                                       | 120 mA        | 80 mA          | 40 mA          |
|                                                     | • <b>10W</b>                                                                                                                                               | 1100 mA                                 | 530 mA                                                                                                       | 240 mA        | 160 mA         | 80 mA          |
| WORKING CURRENT XENON                               | • <b>Energy</b>                                                                                                                                            | <b>12V DC</b>                           | <b>24V DC</b>                                                                                                | <b>48V DC</b> | <b>110V AC</b> | <b>220V AC</b> |
|                                                     | • <b>5J</b>                                                                                                                                                | 460 mA                                  | 280 mA                                                                                                       | 140 mA        | 60 mA          | 35 mA          |
|                                                     | • <b>10J</b>                                                                                                                                               | 850 mA                                  | 490 mA                                                                                                       | 250 mA        | 100 mA         | 60 mA          |
|                                                     | • <b>15J</b>                                                                                                                                               | 1200 mA                                 | 700 mA                                                                                                       | 360 mA        | 140 mA         | 80 mA          |
|                                                     | • <b>21J</b>                                                                                                                                               | NA                                      | 960 mA                                                                                                       | 480 mA        | 180 mA         | 110 mA         |
| CABLES ENTRY                                        | • 4 x M20, 1 x M25 & 3 x M20, 1 x 1/2" NPT & 3 x M20, 1 x 3/4" NPT & 3 x M20. Additional adaptors can be supplied as well as cable glands, please specify. |                                         |                                                                                                              |               |                |                |
| TERMINAL                                            | • From 22 to 14 AWG - from 0.50 mm² to 2.5 mm²                                                                                                             |                                         |                                                                                                              |               |                |                |
| NET WEIGHT                                          | • 3.6 Kg                                                                                                                                                   |                                         |                                                                                                              |               |                |                |

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## ZT-BC150 Ex Beacon / Light



Prefix - **ZT** -

| Products | Certification | Lens Colour | Light Type & Supply | Duty Label | Tag Label | Lens Guard | Connection | Housing Colour | Standard |
|----------|---------------|-------------|---------------------|------------|-----------|------------|------------|----------------|----------|
| BC       | 150           | R           | X05 DC              | N          | N         | N          | A          | RD             | N        |

Standard Product

- BC** ~ BEACON
- 150** ~ HAZARDOUS AREA
- R** ~ RED
- Y** ~ YELLOW
- B** ~ BLUE
- G** ~ GREEN
- A** ~ AMBER
- C** ~ CLEAR

- X05 DC** ~ XENON 5J & DC Supply
- L05 DC** ~ LED 5W & DC Supply
- X10 DC** ~ XENON 10J & DC Supply
- L10 DC** ~ LED 10W & DC Supply
- X15 DC** ~ XENON 15J & DC Supply
- X21 DC** ~ XENON 21J & DC Supply
- X05 AC** ~ XENON 5J & AC Supply
- L05 AC** ~ LED 5W & AC Supply
- X10 AC** ~ XENON 10J & AC Supply
- L10 AC** ~ LED 10W & AC Supply
- X15 AC** ~ XENON 15J & AC Supply
- X21 AC** ~ XENON 21J & AC Supply

- N** ~ 2 x M20 x 1.6
- RD** ~ RED
- YW** ~ YELLOW
- BU** ~ BLUE
- BL** ~ BLACK
- GN** ~ GREEN
- GY** ~ GREY
- OJ** ~ ORANGE
- O** ~ OTHER
- A** ~ 2 x M20 x 1.6
- B** ~ 2 x M25 x 1.5 (via Adaptor)
- C** ~ 2 x 1/2" NPT (via Adaptor)
- D** ~ 2 x 3/4" NPT (via Adaptor)
- Y** ~ YES
- N** ~ NO
- Y** ~ YES
- N** ~ NO
- Y** ~ YES
- 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 |

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

| Colour          | Meaning                 | Action                                                       | Example                                                                                                                                    |
|-----------------|-------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| RED             | EMERGENT                | Dangerous state. Take immediate action.                      | Pressure/Temperature beyond the safe state - Shutdown due to the action of protective devices - Fire alarm - Equipment failure alarm       |
| AMBER<br>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 |