

## Lumiglas Signalling Device M55-BD-Ex



II 2G Ex db IIC T6 Gb  
II 2D Ex tb IIIC T80°C Db

### The smart motion detector/twilight switch:

- The smart motion detector/twilight switch: The M55-BD-Ex automatically switches the light or other users in potentially explosive (Ex) indoor or outdoor areas on and off again.
- Although it has been designed for explosion-protected environments, it can also be used in non-hazardous areas.
- The motion detector is equipped with radar sensor technology and the twilight switch is operated by an optical sensor.
- Implementing the M55-BD-Ex ensures energy-saving operation.
- Numerous applications are feasible thanks to the wide variety of sensor setting options. For instance, the motion detector and twilight switch can be used either separately or in combination.
- Typical applications are:
  - Alarm when entering hazardous areas
  - Switching lights on and off depending on brightness and/or motion
  - Useful as a signal generator for acoustic and optical devices (e.g. horns, warning lamps)
  - Leakage detector on or below container and/or installations (responds to drops)
- Potential-free contact means that the M55-BD-Ex can also be used to generate signals for other control units.
- Stainless steel body: 1.4404

- **Protection class:** IP 65 and IP 67

### • Operating conditions:

Under no circumstances should the movement/brightness detector M55-BD-Ex be used to replace the cover flange or the complete sight glass fitting nor on its own as a closure for a vessel port.

- **For use in ambient temperatures:** -20°C to +40°C

- **EC type examination certificate:** BVS 15 ATEX E 057 X



II 2G Ex db IIC T6 Gb  
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- **Operating voltage:** 230 V AC or 24 V AC/DC

### • Special conditions to ensure safe use:

- Minimum length of connecting cable: at least 1 meter
- The connecting cable should be installed to ensure that no electrostatic hazard can occur

- **Convenient electrical connection with integrated connecting cable**

### • Mounting options:

- Attachment using the hinged bracket included in the scope of supply, stainless steel 1.4301
- Alternative securing options on request

CE 0158

3755.359 c



Lumiglas signalling device M55-BD-Ex

Technical drawing of the 1000 Series Vertical Stand. The drawing shows a side view of the stand with various dimensions and callouts. The main body is a vertical cylinder with a diameter of  $\varnothing 78$ . The total height is 190. The height from the base to the top of the main body is 163. The height from the base to the top of the adjustment mechanism is 60. The height from the base to the top of the main body is 19. The base is a rectangular plate with dimensions 36x8.5. The distance from the base to the top of the main body is 42.5. The drawing includes callouts 1 through 7 pointing to various components: 1 points to the top adjustment mechanism, 2 points to the top adjustment mechanism, 3 points to the top adjustment mechanism, 4 points to the top adjustment mechanism, 5 points to the top adjustment mechanism, 6 points to the top adjustment mechanism, and 7 points to the top adjustment mechanism.

- 1 Ex d cable entry gland M20x1.5
- 2 External protective conductor terminal
- 3 Locking screws M4 A2-70
- 4 Body of detector
- 5 End cover
- 6 Sight glass
- 7 Mounting attachment (hinged bracket)

- Body: stainless steel 1.4404
- Hinged bracket for attachment: stainless steel 1.4301
- Aperture for the sensors: borosilicate glass

- Weight incl. hinged bracket and  
3 m connecting cable 5 x 1 mm<sup>2</sup>: 3.9 kg

Terminal

Ex d-cable gland

grey

black

brown

blue

green/yellow

Switching contact

L1

N

230V AC

Connecting cable 5x1.0qmm

Length: >1m; L#3403.044.00

Terminal

Ex d-cable gland

grey

black

brown

blue

green/yellow

Switching contact

24V AC/DC

Connecting cable 5x1.0qmm  
Length: >1m; L#3403.044.00

- Rated power of electronics: 5 W
- The potential-free contact (relay) switches up to 250 V AC / 5 A / 1250 VA
- Coverage of radar sensor: 72° horizontal and 60° vertical
- Radar sensor range: approx. 10 m
- Sensitivity of radar sensor is adjustable via switch
- Signalling time of switching contact is adjustable via potentiometer (between 5 sec. and 3 min. – other times possible)
- Twilight sensor range adjustable via potentiometer (1-1400 Lux)

Item	Type	Voltage V	Part no.
1	M55-BD-Ex	230 V AC	1702.702.00
2	M55-BD-Ex	24 V AC/DC	1702.701.00

- **Accessories:** Ex-e terminal box 8118, part no. 2507.020.00  
Protective hood for outdoor applications, part no. 1988.026.00
- **Order data:** M55-BD-Ex, 230 V AC (part no. 1702.702.00),  
5 m connecting cable, protective hood (part no. 1988.026.00)