

# HBD Series Bulkhead Luminaires

## Flameproof, Incandescent, Compact Fluorescent, Mixed

Zone 1 and 2 - 21 and 22  
Gas (G) and Dust (D)

### Applications

- Suitable for use in:
  - Stairways
  - Small areas
  - Emergency exit

### Features

- HBDR
  - Lamps (not supplied)
  - Incandescent 200 W maximum
  - Compact Fluorescent 23 W maximum
  - Mixed 160 W maximum
  - Threaded flameproof joint.
  - Operates on ceiling and wall.
- HBDO
  - Incandescent 60 W to 100 W maximum
  - Compact fluorescent 15 W maximum
  - Operates in any position.
  - For incandescent 60 W and 100 W a high temperature cable 106 °C is required.
- Lamps are not supplied.
- E27 lampholder.
- Fixing by two integrated brackets.
- Connection to lampholder via two terminals 2.5 mm<sup>2</sup>.
- Internal earth two terminals 2.5 mm<sup>2</sup>
- External earth one 4 mm<sup>2</sup>.
- 3 x M20 threaded entries in “T” formation.
- Supplied with two blanking plugs M20.
- Supplied with Protective Guard

### Standard Materials

- Body and bezel: gray painted aluminum
- Glass: sealed toughened lamp glass
- Protective guard: zinc plated steel

### Certifications and Compliances

#### ◆ ATEX Certification

- **HBRD - Certification Type HBRd**
  - Gas: Zones 1 and 2
  - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
  - Type of Protection: Ex d IIC
  - Temperature Class: See Table on following page
- Dust: Zones 21 and 22
  - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
  - Type of Protection: Ex tD A21
  - Ambient Temperature: -40 °C to +55 °C
  - CE Declaration of Conformity: 50242
  - ATEX Certificate: LCIE 02 ATEX 6163
  - Index of Protection according EN/IEC 60529: IP66
  - Impact Resistance (shock): IK08
  - Internal Volume: > 2 dm<sup>3</sup> -2 liters
- **HBDO - Certification Type HBOD**
  - Gas: Zones 1 and 2
  - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
  - Type of Protection: Ex d IIB
  - Temperature Class: See Table on following page
- Dust: Zones 21 and 22
  - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
  - Type of Protection: Ex tD A21
  - Ambient Temperature: -20 °C to + 40 °C



**HBDR**  
Round Bulkhead (supplied with Protective Guard)



**HBDO**  
Oval Bulkhead (supplied with Protective Guard)

- CE Declaration of Conformity: 50234
- ATEX Certificate: LCIE 02 ATEX 6162
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK08
- Internal Volume: > 2 dm<sup>3</sup> -2 liters

#### ◆ EURASEC Certification

- EURASEC N° TC RU C-FR.Г505.В.00912

#### ◆ Others Certification


- **HBDO - Certification Type HBOD**
  - INMETRO Certificate: BVC11.0597 <sup>①</sup>

<sup>①</sup> Inmetro certification available on special request only. Contact your local sales for more information

# HBDR Series Bulkhead Luminaires

## Flameproof. Incandescent, Compact Fluorescent, Mixed

Zone 1 and 2 - 21 and 22  
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	Weight kg	Volume dm <sup>3</sup>	Catalog Number
	7.5	23.4	HBDR

### Spare Parts

	Catalog Number
Protective Guard	HBDRPGZ

### T Rating for Gas ①

Lamp Type and Wattage			Operating Positions					
			Ceiling			Wall		
Wattage	Type	Ambient Temperature	+40° C	+50° C	+55° C	+40° C	+50° C	+55° C
8	Compact Fluorescent	T Rating	T6	T6	T6	T6	T6	T6
15	Compact Fluorescent	T Rating	T6	T6	T6	T6	T6	T6
23	Compact Fluorescent	T Rating	T6	T6	T6	T5	T5	T4
100	Incandescent	T Rating	T5	T4	T4	T5	T4	T4
200	Incandescent	T Rating	T4	T4	T4	T4	T4	T4
		T° at cable entry	—	+84° C	+89° C	—	+84° C	+89° C
100	Mixed	T Rating	T4	T4	T4	T4	T4	T4
180	Mixed	T Rating	T3	T3	T3	T3	T3	T3
		T° at cable entry	—	+87 C	+92° C	—	+87 C	+92° C

### Surface Temperature for Dust ①

Lamp Type and Wattage		Operating Positions			
		Ceiling		Wall	
Wattage	Type	Surface T° for Ta = +55 °C	T° at Cable Entry Ta= +55 °C	Surface T° for Ta= +55 °C	T° at Cable Entry Ta= +55 °C
8	Compact Fluorescent	+60 °C	—	+70 °C	—
15	Compact Fluorescent	+64 °C	—	+76 °C	—
23	Compact Fluorescent	+69 °C	—	+96 °C	—
100	Incandescent	+105 °C	—	+105 °C	—
200	Incandescent	+130 °C	+89 °C	+130 °C	+89 °C
100	Mixed	+130 °C	—	+130 °C	—
160	Mixed	+149 °C	+92 °C	+149 °C	+92 °C


① No need for high temperature cable for cable entry temperature less than +80 °C .

Shaded catalog numbers are normally stocked items. All other items are made to order.

# HBDO Series Bulkhead Luminaires

## Flameproof, Incandescent, Compact Fluorescent

Zone 1 and 2 - 21 and 22  
Gas (G) and Dust (D)

	Weight kg	Volume dm <sup>3</sup>	Catalog Number
	3	9	HBDO

### Spare Parts

	Catalog Number
Protective Guard	HBDOPGZ
Terminal block For through wiring 2 x 2.5 mm <sup>2</sup> with high temperature sleeve	094784

### T Rating for Gas ①

Lamp Type and Wattage		Temperature Class for Ta = +40 °C	T° at Cable Input for Ta = +40 °C
Wattage	Type		
7	Compact Fluorescent	T6	—
11	Compact Fluorescent	T6	—
15	Compact Fluorescent	T6	—
60	Incandescent	T4	+106 °C
100	Incandescent	T4	+106 °C

### T Rating for Dust ①

Lamp Type and Wattage		Temperature Class for Ta = +40 °C
Wattage	Type	
7	Compact Fluorescent	+76 °C
11	Compact Fluorescent	+76 °C
15	Compact Fluorescent	+76 °C
60	Incandescent	+119 °C
100	Incandescent	+119 °C

① No need for high temperature cable for cable entry temperature less than +80 °C.

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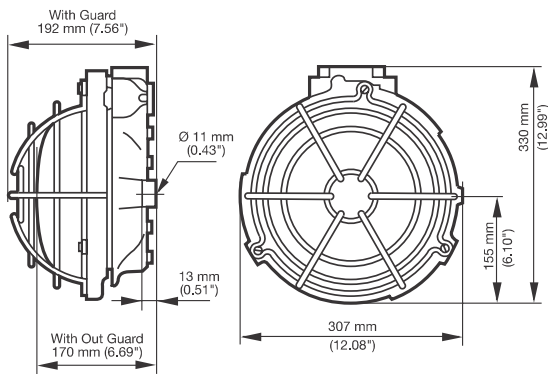
# HBD Series Bulkhead Luminaires

## Flameproof. Incandescent, Compact Fluorescent, Mixed

Zone 1 and 2 - 21 and 22  
Gas (G) and Dust (D)

### HBDR Series Bulkhead Luminaires – Incandescent, Compact Fluorescent, Mixed

#### Dimensions in Millimeters (Inches)

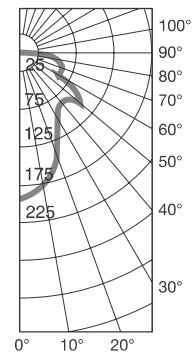


#### Photometric Data ①

Incandescent  
NF C 71-120: .068 G + 0.01 T

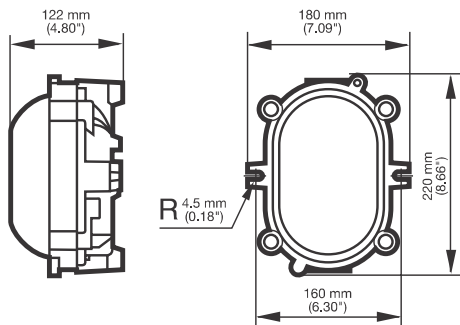
#### CANDELA DISTRIBUTION

0	185
5	178
10	171
15	156
20	132
25	110
30	97
35	87
40	90
45	100
50	96
60	58
70	58



### HBDO Series Bulkhead Luminaires – Incandescent, Compact Fluorescent

#### Dimensions in Millimeters (Inches)

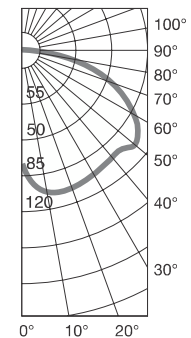


#### Photometric Data ①

Incandescent  
NF C 71-120: .068 H

#### CANDELA DISTRIBUTION

0	67
5	94
10	96
15	99
20	99
25	97
30	95
35	96
40	91
45	91
50	98
60	87
70	69



① Polar curves for a 1000 lm output according to NF C 71-120. Luminaire symbol according to NF C 71-121.