

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 mm².
- Internal earth two terminals 2.5 mm²
- External earth one 4 mm².
- 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 dm³ -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 dm³ -2 liters

◆ EURASEC Certification

- EURASEC N° TC RU C-FR.Г505.B.00912

◆ Others Certification


- **HBDO - Certification Type HBOD**
 - INMETRO Certificate: BVC11.0597 ^①

^① Inmetro certification available on special request only. Contact your local sales for more information

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	Weight kg	Volume dm ³	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.

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	Weight kg	Volume dm ³	Catalog Number
	3	9	HBDO

Spare Parts

	Catalog Number
Protective Guard	HBDOPGZ
Terminal block For through wiring 2 x 2.5 mm ² 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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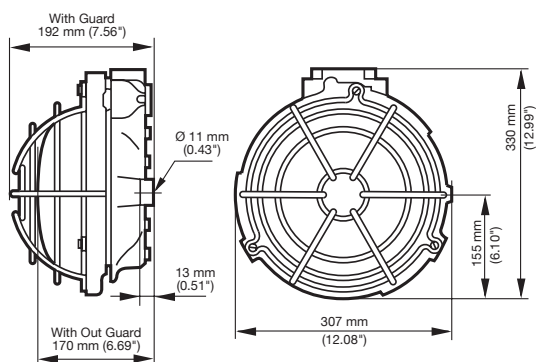
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Dimensions in Millimeters (Inches)

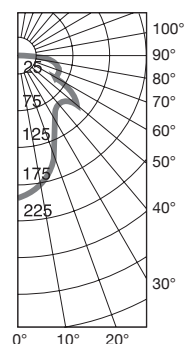


Photometric Data ①

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

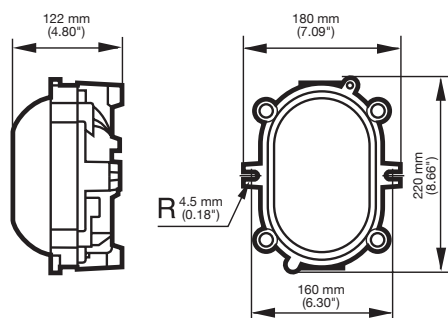
CANDELA DISTRIBUTION

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



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Dimensions in Millimeters (Inches)

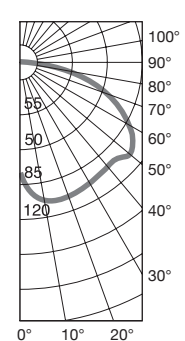


Photometric Data ①

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.