

**Lighting:** Incandescent & HID Lighting  
**HBDC Series:** Cylindrical Bulkhead – Flameproof



70 W Sodium Version



Compact Fluorescent Version



**Compliance Data:**

ATEX – IECEx

Zone 1 & 2 – 21 & 22	ATEX	II 2 GD	IECEx	CE
Ex d IIC	T6 to T4	Ex tD A21	T95°C to T130°C	IP66/68 (10 meters)

**Lamp Type and Power:**

Incandescent	Compact Fluorescent	Fluorescent	HP Sodium	
2x40 W	20 Max	8 W	70 W	

**Operating Temperature:**

-20°C to +55°C
-40°C to +50°C (70 W HP Sodium)

# Lighting: Incandescent & HID Lighting

## HBDC Series: Cylindrical Bulkhead – Flameproof

Zone 1, 2, 21 & 22

II 2 GD

ATEX / IEC

IP66/68 (10M) - IK08

### Applications:

- For illumination of:
- Stairways
  - Small areas
  - Emergency exit

### Features:

- For lamps:
  - 70 W high pressure sodium (ovoid type E27 lampholder)
  - 18/20 W compact fluorescent lamp (E27 lampholder)
  - 2x40 W incandescent lamp (E27 lampholder)
  - 8 W fluorescent bulb (G5 lampholder) (lamp supplied)
- Lamps are not supplied except for 8 W fluorescent bulb.
- HPS version: compensated power supply 230/240 V 50 Hz (+/-10%) with power factor 0.9.
- Connection to plug-in terminal block via 2x 3 terminals 2.5 mm<sup>2</sup>.
- Operates in any position.
- Threaded access cover with O-ring seal.
- Two integrated mounting lugs.
- 1 external earth via 4 mm<sup>2</sup> bracket.
- 2 threaded cable entries.
- Supplied with 1 plug M20 (cable gland not supplied).

### Standard Material of Fixtures:

- Zamak end cap and cover, anticorrosion treated and painted gray.
- Toughened glass sealed tube.

### Standard Material of Accessories:

- Galvanized steel external reflector painted white.
- Zinc plated steel protective guard.
- Fixing accessories available in 316 stainless steel or zinc plated steel.
- Fall prevention fixing kit in stainless steel.

### Catalog Number Logic

<b>HBDC</b>	<b>X</b>	<b>X</b>	<b>XX</b>	<b>XXX</b>
Series		Quantity of Lamps:		Voltage:
		1 = One Lamp		02A = 24 Vac 50/60 Hz
		2 = Two Lamp	Power:	02D = 24 Vdc
Lamp Type :			40 = 40 W (1)	04A = 48 Vac 50/60 Hz
I = Incandescent			18 = 18/20 W (2)	04D = 48 Vdc
F = Fluorescent			70 = 70 W (3)	11A = 110 Vac 50/60 Hz
L = High Pressure Sodium			08 = 8 W Fluorescent	11D = 110 Vdc
				24A = 230/240 Vac 50/60 Hz (4)
				24B = 230/240 Vac/Vdc 50/60 Hz













(1) Incandescent Lamp  
 (2) Compact Fluorescent Lamp  
 (3) High Pressure Sodium Lamp (HP)  
 (4) 50 Hz only for the 70 W HPS Version

### Ordering Information:

Lamp	Lampholder	Voltage	Weight (kg)	Volume (dm <sup>3</sup> )	Catalog Number	Old Catalog Number	Packing
2x40 W Inc (1)	E27	-	7.1	31	HBDCI240	094716	1
70 W HP Sodium (1)	E27	230/240 Vac 50 Hz	7.1	33	HBDCI17024A	094717	1
1x8 W Fluo	G5	24 Vdc	8.3	31	HBDCF10802D	094730	1
1x8 W Fluo	G5	48 Vdc	8.3	31	HBDCF10804D	094731	1
1x8 W Fluo	G5	110 Vdc	8.3	31	HBDCF10811D	094732	1
1x8 W Fluo	G5	230/240 Vac 50/60 Hz	8.3	31	HBDCF10824B	094733	1
		198/254 Vdc					
2x8 W Fluo	G5	230/240 Vac 50/60 Hz	8.3	31	HBDCF20824B	094734	1
		198/254 Vdc					
1x18/20 W Compact Fluo (1)	E27	-	7.1	33	HBDCF118	094718	1

(1) lamp not supplied

### Accessories:

	Catalog Number	Old Catalog Number	Packing
 External reflector in galvanized steel (painted white) (not compatible with 70 W HPS version)	FDER1G	094866	1
 Protective guard in zinc plated steel	FDPG1Z	094872	1
 Protective guard in zinc plated steel for 70 W HPS version	FDPG5Z	094876	
 Quick one-hand fixing (Set of 2 brackets) in zinc plated steel	FDFBZ	094897	1
 Quick one-hand fixing (Set of 2 brackets) in 316 stainless steel	FDFBS	094889	1
 Fixing unit on flat surface (Set of 2 brackets) in zinc plated steel	FDSBZ	094898	1
 Fixing unit on flat surface (Set of 2 brackets) in 316 stainless steel	FDSBS	094890	1
 Fixing unit for 1 1/2 (Ø49 mm) or 1 1/4 (Ø42 mm) tube in zinc plated steel	FDHC49Z	094899	1
 Fixing unit for 1 1/2 (Ø49 mm) or 1 1/4 (Ø42 mm) tube in 316 stainless steel	FDHC49S	094892	1
 Fixing unit for 2 (Ø60 mm) tube in zinc plated steel	FDHC60Z	094891	1
 Fixing unit for 2 (Ø60 mm) tube in 316 stainless steel	FDHC60S	094893	1
 Fall prevention fixing kit (1,2 m chain) in stainless steel	FDSCS	093819	1

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ATEX / IEC

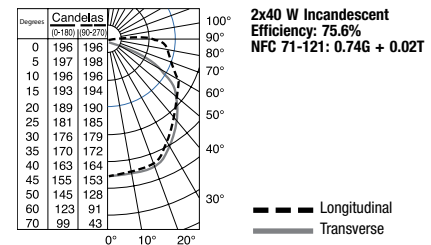
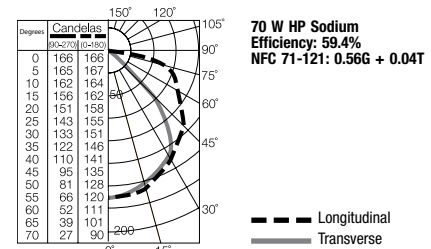
IP66/68 (10M) - IK08

### Compliances:

Hazardous Area	Gas	Dust
Certified Type	FLd	
Zones	1 – 2	21 – 22
Conforming to ATEX 94/9/CE	CE 0081 ⊕ II 2 G	CE 0081 ⊕ II 2 D
Symbol of protection ATEX	Ex d IIC	Ex tD A21
Symbol de protection IEC		
T Rating	See Table	NA
Surface Temperature	NA	See Table
Ambient Temperature	-20°C ≤ Ta ≤ +55°C -20°C ≤ Ta ≤ +55°C for 70W HPS	
CE Declaration of conformity	50203	
ATEX Certificate	LCIE 97 ATEX 6012	
IEC Certificate	IECEx LCI 04.0018	
Other Certifications	GOST	
Index of protection (solid & liquid)	IP 66 / 68 (10 m)	
Impact resistance (shock)	IK08	
Internal Volume	> 2 dm <sup>3</sup> (2 liters)	

### Photometric Data:

Polar curves for a 1000 lm flux, according to NF C 71-120 Luminaire symbol according to NF C 71-121



### Table:

Versions	Dust		Gas			
	Surface Temperature		T rating			
	Without External Reflector	With External Reflector	Without External Reflector		With External Reflector	
			Ta=+40°C	Ta=+55°C	Ta=+40°C	Ta=+55°C
Incandescent lamp (2x40 W)	95°C	95°C	T5	T5	T5	T5
Compact Fluorescent lamp (20 W max)	95°C	130°C	T6	T5	T5	T4
Fluorescent (8 W - G5 lampholder)	95°C	130°C	T6	T5	T5	T4
High Pressure Sodium Lamp (70 W ovoid)	122°C	-	T4 for Ta = +50°C		-	-

### Standards:

<b>Ex Standards</b>	EN / IEC 60079-0 ; 60079-1 ; 61241-0 ; 61241-1
<b>Product Standards</b>	EN / IEC 60598-1
<b>EMC Standards</b>	/
<b>Other Standards</b>	EN / IEC 60529 (IP) ; 62262 (IK)

### Dimensions (mm):

