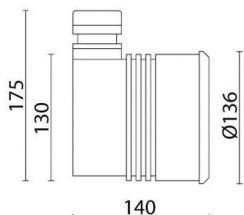


Last information update: May 2018

**Recessed luminaires for fountains - Recessed luminaire 3 LEDs - 350mA DC****Product code**

BH99

**Technical description**

Monochrome recessed luminaire for permanent immersion, IP68 10m. The luminaire is made strictly of AISI 316L stainless steel to guarantee maximum lasting reliability in pools and fountains (fresh water). Clear, transparent 6mm thick tempered closing glass. All screws used are made of stainless steel and the seals are silicone. The product is supplied with a 3m long 2x0,5NS20N power cable. The luminaire technical characteristics conform to EN60598-2-18 standards and particular requirements. IP68 - IK08. The luminaire is complete with 3 Neutral White LEDs (3x1,2W). Optical assembly opening is not required for its installation. Insulation class III. The luminaire must be powered by a 350mA DC external driver.

**Dimension (mm)**

140x136

**Colour**

Steel (13)

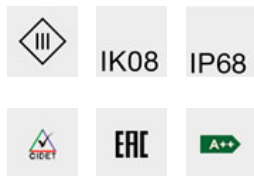
**Mounting**

wall recessed|ground recessed

**Notes**

Permanent immersion

Complies with EN60598-1 and pertinent regulations

**Product configuration: BH99****Product characteristics**

Total lighting output [Lm]: 251  
 Total power [W]: 3.1  
 Luminous efficacy [Lm/W]: 80.9  
 Life Time: 100,000h - L80 - B10 (Ta 25°C)  
 Number of optical assemblies: 1

Total luminous flux at or above an angle of 90° [Lm]: 0  
 Emergency luminous flux [Lm]: /  
 Voltage [V]: -  
 Ambient temperature range: from -20°C to +35°C.

**Optical assembly Characteristics Type 1**

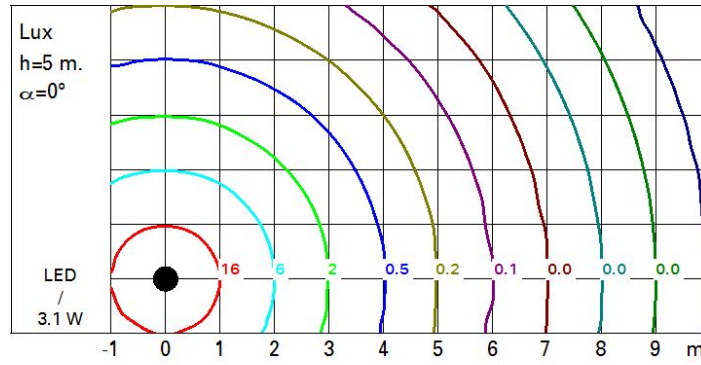
Light Output Ratio (L.O.R.) [%]: 76  
 Lamp code: LED  
 ZVEI Code: LED  
 Nominal power [W]: 3.1  
 Nominal luminous [Lm]: 330  
 Lamp maximum intensity [cd]: /  
 Beam angle [°]: 28°

Number of lamps for optical assembly: 1  
 Socket: /  
 Ballast losses [W]: 0  
 Colour temperature [K]: 4000  
 CRI: 75  
 Wavelength [Nm]: /  
 MacAdam Step: /

**Polar**

Imax=684 cd	Lux			
	h	d	Em	Emax
90°	1	0.5	519	684
750	2	1	130	171
0°	3	1.5	58	76
$\alpha = 28^\circ$	4	2	32	43

**Isolux**



**UGR diagram**

Corrected UGR values (at 330 lm bare lamp luminous flux)											
Reflect.:		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
ceiling/cav		0.70	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
walls		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
work pl.		viewed crosswise					viewed endwise				
Room dim											
x	y										
2H	2H	9.5	10.1	9.8	10.4	10.6	9.5	10.1	9.8	10.4	10.6
	3H	9.7	10.3	10.0	10.5	10.8	9.5	10.1	9.8	10.4	10.7
	4H	9.7	10.3	10.1	10.6	10.9	9.5	10.1	9.8	10.4	10.7
	6H	9.7	10.3	10.1	10.6	10.9	9.5	10.0	9.8	10.3	10.6
	8H	9.7	10.2	10.1	10.6	10.9	9.4	9.9	9.8	10.2	10.6
	12H	9.7	10.2	10.1	10.5	10.9	9.4	9.9	9.8	10.2	10.6
4H	2H	9.5	10.1	9.8	10.4	10.7	9.7	10.3	10.1	10.6	10.9
	3H	9.8	10.3	10.2	10.6	11.0	9.9	10.3	10.3	10.7	11.0
	4H	9.9	10.3	10.3	10.7	11.1	9.9	10.3	10.3	10.7	11.1
	6H	9.9	10.3	10.4	10.7	11.1	9.9	10.3	10.3	10.7	11.1
	8H	9.9	10.3	10.4	10.7	11.1	9.9	10.2	10.3	10.6	11.1
	12H	9.9	10.2	10.4	10.6	11.1	9.8	10.1	10.3	10.6	11.0
8H	4H	9.9	10.2	10.3	10.6	11.1	9.9	10.3	10.4	10.7	11.1
	6H	9.9	10.2	10.4	10.7	11.1	10.0	10.2	10.4	10.7	11.2
	8H	9.9	10.2	10.4	10.6	11.1	9.9	10.2	10.4	10.6	11.1
	12H	9.9	10.1	10.4	10.6	11.1	9.9	10.1	10.4	10.6	11.1
12H	4H	9.8	10.1	10.3	10.6	11.0	9.9	10.2	10.4	10.6	11.1
	6H	9.9	10.1	10.4	10.6	11.1	9.9	10.2	10.4	10.6	11.1
	8H	9.9	10.1	10.4	10.6	11.1	9.9	10.1	10.4	10.6	11.1
Variations with the observer position at spacing:											
S =	1.0H	2.5 / -2.1				2.5 / -2.1					
	1.5H	4.7 / -3.2				4.7 / -3.2					
	2.0H	6.5 / -3.8				6.5 / -3.8					