

ATX™ HRD Series Tank Inspection Lights

Flameproof. Incandescent, Halogen

ATEX:
 Zone 1 and 2 - 21 and 22
 Ⓢ II 2 GD
 IP65 or IP66/IK08

Applications

- Designed to illuminate the interiors of boilers, tanks, bunkers, silos, mixers, separators, pipelines and other vessels or reactors that are normally closed.
- For use in hazardous areas where ignitable vapors, gases or highly combustible dusts are present.
- For installation in chemical and petrochemical plants, refineries and other process industries.

Features

- Type IIB version:
 - 40 W to 100 W incandescent or 50 W halogen lamp (lamp not supplied).
 - Internal aluminum reflector.
 - Operates in any position.
 - E27 lampholder.
 - Terminals: 2.5 mm² (0.004 in²).
 - Internal and external earth: 2.5 mm² (0.004 in²).
 - High temperature cable to be used.
 - Fixing by three integrated lugs.
 - One M20 threaded cable entry.
- Type IIC version:
 - 20 W to 50 W halogen lamp (lamp supplied).
 - Internal aluminum reflector.
 - Operates in any position.
 - G4 lampholder for 20 W and BA 15d for 50 W.
 - Power supply: 230 V 50/60 Hz.
 - Fitted with transformer 230/12 V for 12 V halogen lamp.
 - Terminals: 2.5 mm² (0.004 in²) terminals.
 - Internal earth: 2.5 mm² (0.004 in²).
 - External earth: 4 mm² (0.006 in²).
 - Supplied with a set of rocker hinges for mounting with DN 50 to DN 150 sightglass fittings (according to DIN 28 120).
 - One M20 threaded cable entry (via increased safety “e” box).

Standard Materials

- Body and bezel: gray painted marine grade aluminum alloy
- Lens: toughened sealed lamp glass
- Reflector: internal aluminum

ATEX Certifications and Compliances

- IIB Version
 - Certification Type: HRCd
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex d IIB
 - Temperature class: T4 to T3
 - Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T130 °C to T195 °C (T266 °F to T383 °F)
 - Ambient Temperature: -40 °C to +40 °C (-40 °F to +104 °F)
 - CE Declaration of Conformity: 50241
 - ATEX Certificate: LCIE 02 ATEX 6232
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK08
 - Internal Volume: > 2 dm³ (122 in³) -2 liters



IIB Version



IIC Version (50 W)



IIC Version (20 W)



IIB Version Fitted with
DN Model Sightglass Fitting

- IIC Version
 - Certification Type: HRC 20WH (20W), HRC 50 (50W)
 - Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex d IIC
 - Temperature class: T4 (20W), T3 (50W)
 - Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: 20 W: T130 °C (T266 °F), 50 W: T195 °C (T383 °F)
 - Ambient Temperature: -20 °C to +40 °C (-4 °F to +104 °F)
 - CE Declaration of Conformity: 50260 (20W), 50661 (50W)
 - ATEX Certificate: LCIE 03 ATEX 6110 (20W), LCIE 03 ATEX 6109 (50W)
 - Index of Protection according EN/IEC 60529: IP65

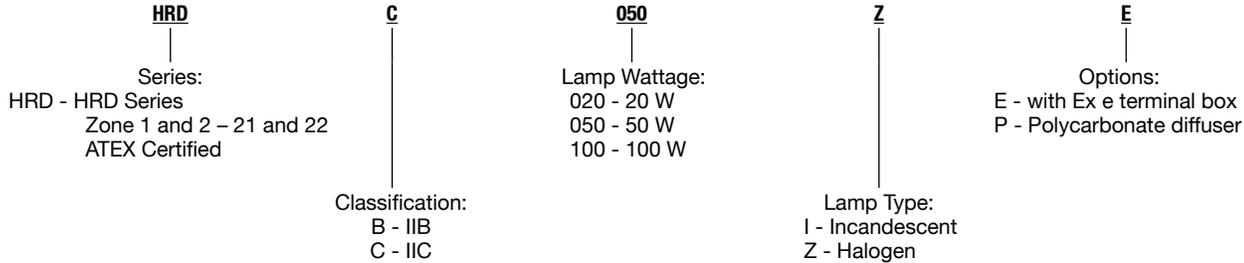
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Order using catalog numbering guide below or select catalog number from table below

Catalog Numbering Guide — HRD Series Tank Inspection Lights



Description	Type	Weight kg (lb)	Volume dm ³ (in ³)	Catalog Number
40 W to 100 W incandescent or 50 W halogen ①	IIB	2.90 (6.39)	8.10 (494.3)	HRDB100I
20 W halogen ② 230 V, 50/60 Hz	IIC	2.30 (5.07)	3.00 (183.1)	HRDC020ZE
50 W halogen ② 230 V, 50/60 Hz	IIC	4.00 (8.82)	3.60 (219.7)	HRDC050ZE

Technical Data

Catalog Number	Version	Lamp Type and Wattage	T Rating	Ambient Temperature = +40 °C (+104 °F)	
				Gas Cable Temperature	Dust Surface Temperature
HRDB100I or NHRDB100I (lamp not supplied)	IIB	40 W Incandescent	T4	N.A.	+130 °C (+266 °F)
		60 W Incandescent	T3	+87 °C (+188.6 °F)	+137 °C (+278.6 °F)
		100 W Incandescent	T3	+107 °C (+224.6 °F)	+195 °C (+383 °F)
		50 W Halogen	T3	+82 °C (+179.6 °F)	+149 °C (+300.2 °F)

① Can also be used with compact fluorescent lamp.

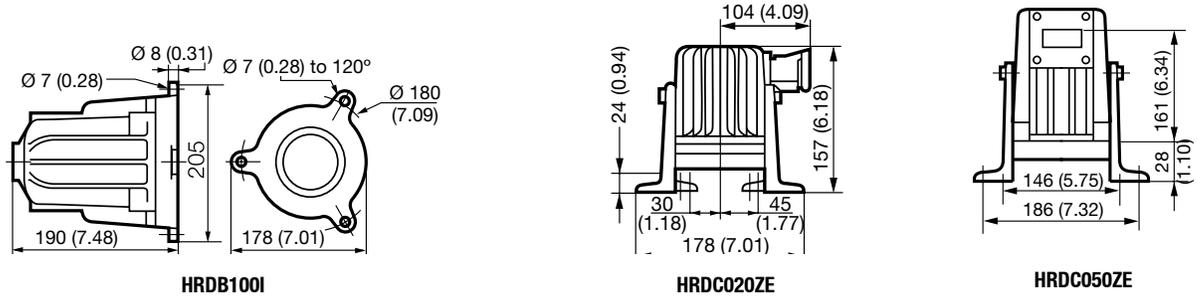
② Lamp supplied.

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Dimensions in Millimeters (Inches)



Photometric Data

IIC Versions

ISOLUX CURVE		20 W Version		Illuminance E (lux)				
Height (m)	Position	Distance (cm)	Illuminance E (lux)					
			0	10	20	30	40	
1	L		3000	1000	125	-	-	
	H		3000	900	75	-	-	
2	L		1150	750	300	100	50	
	H		1150	750	300	100	50	

ISOLUX CURVE		50 W Version		Illuminance E (lux)				
Height (m)	Position	Distance (cm)	Illuminance E (lux)					
			0	10	20	30	40	
1	L		12000	2300	375	50	-	
	H		12000	2700	250	50	-	
2	L		2550	1550	600	200	-	
	H		2550	1800	800	200	-	

IIB Versions

Polar curves for a lumen output of 1000 lm flux, according to NF C 71-120
 Luminaire symbol as per NF C 71-121

100 W Incandescent

CANDELA DISTRIBUTION

Degree	Candelas
0	155
5	145
10	136
15	135
20	133
25	127
30	112
35	90
40	66
45	54
50	46
60	29
70	11

