

LDB, LDG and LDR Series Wellglass Luminaires

Flameproof. High Pressure High Pressure Sodium, Mercury, Metal Halide, Mixed, Incandescent, Induction

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

Applications

- For use in hazardous locations such as plants where plastics, paints, thinners and petrochemicals are manufactured.
- Ideal for street lighting on refinery sites or oil depots and for tank lighting purposes.

Features

- Compensated power supply.
- Power factor ≥ 0.9
- Flat joint for IIB version, threaded joint for IIC version.
- E40 lamp holder with lock thread.
- High temperature internal wiring.
- Operates in any position subject to lamp type.
- Easy and efficient wiring due to separate Ex e terminal box with wiring onto two captive terminals capacity 6 mm² and two internal earth terminals capacity 6 mm².
- External earth terminal capacity 4 mm².
- 2 x M20 clearance holes through-wire cable entries supplied with one Ex e unarmored cable gland — sealing diameter 6.5 to 14.5 mm — and one blanking plug and two M20 locknuts.

Standard Materials

- Body and bezel: gray painted marine grade aluminum alloy
- Internal reflector: aluminum
- External reflector: white painted zinc plated steel

Certifications and Compliances

◆ ATEX/IECEx Certification

- **Certification Type: LTd (Model LT2d)**
 - Gas: Zone 1 - 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex de IIB (LDB series); Ex de IIC (LDG and LDR series)
 - Temperature Class: *See Table on following page*
 - Dust: Zone 21 - 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: *See Table on following page*
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50246
 - ATEX Certificate: LCIE 02 ATEX 6165
 - IECEx Certificate: IECEx LCI Ex 04.0019
 - Index of Protection according EN/IEC 60529: IP66/67
 - Impact Resistance (shock): IK08

◆ EURASEC Certification

- EURASEC N° TC RU C-FR.Г505.B.00912



LDB Version



LDB Version with Guard

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T Rating for Gas

Lamp Type and Wattage	Ambient Temperature			
	Lighting Downward		Lighting Upward	
	Ta = +40 °C	Ta = +55 °C	Ta = +40 °C	Ta = +55 °C
85 W Induction	T6	T6	T6	T5
100 W High Pressure Sodium	T6	T5	T5	T4
150 W High Pressure Sodium	T6	T5	T4	T4
250 W High Pressure Sodium	T4	T4	T3	T3
250 W Metal Halide	T4	T4	T4	T3
250 W Mercury	T4	T4	T3	T3
250 W Mixes	T4	T4	T3	T3
300 W Incandescent	T5	T4	T3	T3
500 W Incandescent	T3	T3	T3	T2
400 W High Pressure Sodium	T4	T3	Not Available	Not Available
400 W Metal Halide	T4	T3	Not Available	Not Available

Surface Temperature for Dust

Lamp Type and Wattage	Lighting Downward	Lighting Upward
	°C	°C
85 W Induction	+80	+95
100 W High Pressure Sodium	+95	+130
150 W High Pressure Sodium	+95	+130
250 W High Pressure Sodium	+130	+195
250 W Metal Halide	+130	+195
250 W Mercury	+130	+195
250 W Mixes	+130	+195
300 W Incandescent	+130	+195
500 W Incandescent	+195	+290
400 W High Pressure Sodium	+134	Not Available
400 W Metal Halide	+134	Not Available

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Supplied with 1 x M20 Ex e cable gland in polyamide— 6.5 to 14.5 mm diameter — and 1 x M20 blanking plug. Lamps are not supplied, except for Induction version.

Lamp Wattages	Voltage (+/- 10%)	Lamp Type		Weight kg	Volume dm ³	Catalog Number
		Ellipsoidal	Tubular			
Flameproof Wellglass Luminaires for Hazardous Areas – Ex de IIB – LDB Series						
Electro Magnetic Induction ②						
85 W ①	230/240 Vac, 50/60 Hz	—	—	22.0	86.7	LDBQ85AG2BJ
High Pressure Sodium						
100 W ①④	230/240 Vac, 50 Hz	X	X	22.0	86.7	LDBL10AG2XJ
150 W ①④	230/240 Vac, 50 Hz	X	X	22.5	86.7	LDBL15AG2XJ
250 W ①	230/240 Vac, 50 Hz	X	X	22.5	86.7	LDBL25AG2XJ
Metal Halide						
250 W ①	230/240 Vac, 50 Hz	X	X	22.5	86.7	LDBH25AG2XJ
Mercury Vapor						
250 W ①	230/240 Vac, 50 Hz	—	—	22.5	86.7	LDBM25AG2XJ
Incandescent						
300 W to 500 W ③	—	—	—	19.0	86.7	LDBI30AG2
Flameproof Wellglass Luminaires for Hazardous Areas – Ex de IIC – LDG series						
Electro Magnetic Induction ②						
85 W (1)	230/240 Vac, 50/60 Hz	—	—	22.0	86.7	LDGQ85AG2BJ
High Pressure Sodium						
100 W ①	230/240 Vac, 50 Hz	X	X	22.0	86.7	LDGL10AG2XJ
150 W ①	230/240 Vac, 50 Hz	X	X	22.5	86.7	LDGL15AG2XJ
250 W ①	230/240 Vac, 50 Hz	X	X	22.5	86.7	LDGL25AG2XJ
Metal Halide						
250 W ①	230/240 Vac, 50 Hz	X	X	22.5	86.7	LDGH25AG2XJ
Mercury Vapor						
250 W ①	230/240 Vac, 50 Hz	—	—	22.5	86.7	LDGM25AG2XJ
Incandescent						
300 W to 500 W ③	—	—	—	19.0	86.7	LDGI30AG2
Flameproof Wellglass Luminaires for Hazardous Areas – Ex de IIC – LDR Series						
High Pressure Sodium						
400 W ①	220/230/240 Vac, 50 Hz	X	X	31.0	144	LDRL40AG2XJ
Metal Halide						
400 W ①	220/230/240 Vac, 50 Hz	X	X	31.0	144	LDRH40AG2XJ

① Ballast supplied.

② Service life 60,000 hours.

③ 250 W mixed lamps can be used.










④ Also available in LDM Series

LDB, LDG and LDR Series Wellglass Luminaires

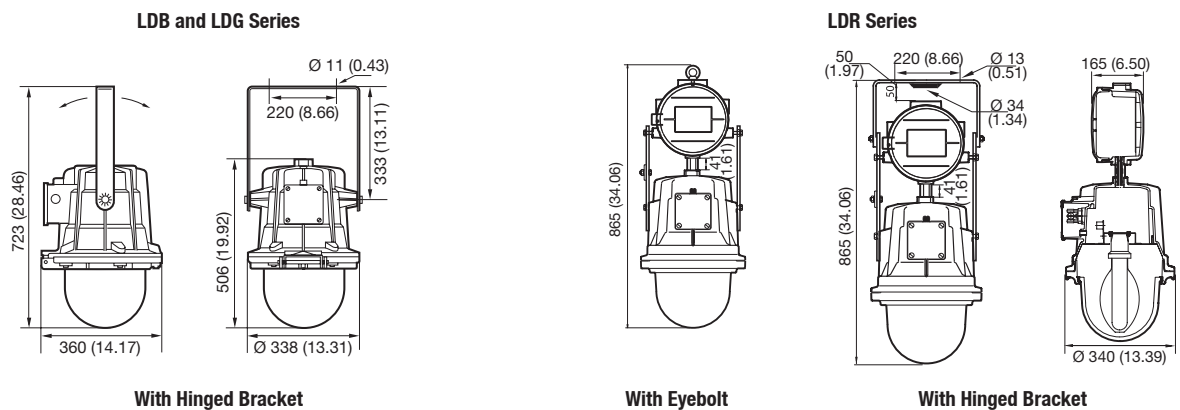
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Accessories

Description	Weight kg	Volume dm ³	Catalog Number
Protective Guard			
 Zinc plated steel protective guard	1.2	27	LDPG2Z
External Reflector			
 White painted steel	3.4	108	LDER2Z
 White polyester	2.5	108	LDER2P
Hinged Bracket — Zinc plated steel hinged bracket for installation on flat surface			
 For LDB or LDG Series	3.4	8	LDGHBZ
 For LDR Series	3.4	8	LDRHBZ
Eyebolt — Zinc plated steel eyebolt for suspension			
 M10 — For LDB or LDG Series	0.1	0.2	LDRBM10Z
 M16 — For LDR Series	0.1	0.2	LDRBM16Z
Mounting Strap — Zinc plated steel mounting straps			
 For LDB or LDG Series	0.9	0.6	LDGSBZ
 For LDR Series	0.9	0.6	LDRSBZ

Dimensions in Millimeters (Inches)



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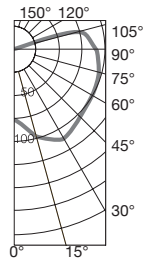
Photometric Data

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

85 W Induction
Efficiency 85.9%
NF C 71-121: 0.62 J + 0.24 T

CANDELA DISTRIBUTION

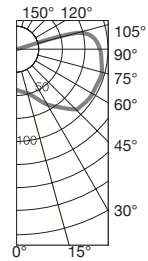
	90-270	0-180
0	75	75
5	80	80
10	89	89
15	98	98
20	105	105
25	114	114
30	117	117
35	116	116
40	112	112
45	107	107
50	102	102
55	99	99
60	97	97
65	94	94
70	92	92



150 W High Pressure Sodium
Efficiency 70.6%
NF C 71-121: 0.50 J + 0.20 T

CANDELA DISTRIBUTION

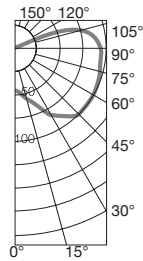
	90-270	0-180
0	33	33
5	36	36
10	42	42
15	48	48
20	55	55
25	62	62
30	70	70
35	78	78
40	84	84
45	87	87
50	89	89
55	88	88
60	88	88
65	87	87
70	87	87



250 W High Pressure Sodium
Efficiency 79.3%
NF C 71-121: 0.56 J + 0.23 T

CANDELA DISTRIBUTION

	90-270	0-180
0	40	40
5	43	43
10	49	49
15	57	57
20	64	64
25	72	72
30	80	80
35	89	89
40	95	95
45	97	97
50	98	98
55	97	97
60	96	96
65	95	95
70	94	94



500 W Incandescent
Efficiency 98%
NF C 71-121: 0.71 H + 0.28 T

CANDELA DISTRIBUTION

	90-270	0-180
0	147	147
5	128	128
10	133	133
15	149	149
20	159	159
25	159	159
30	173	173
35	166	166
40	157	157
45	136	136
50	120	120
55	104	104
60	99	99
65	91	91
70	92	92

