

LDM Series Wellglass Luminaires

Flameproof. HID, Compact Fluorescent, Halogen, Incandescent, Mixed

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

- E27 or E40 lamp holder.
- High temperature internal wiring.
- Threaded flame path.
- Stainless steel fastenings.
- Closed by screwing on bezel.
- Operates in any position.
- Easy and efficient wiring due to separate Ex e terminal box with wiring onto two captive terminals capacity 2 x 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

Certifications and Compliances

◆ ATEX/IECEx Certification

- **Certification Type: LTd (Model LT1d)**
 - Gas: Zone 1 - 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex de IIC
 - 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



LDM Version



LDM 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 = +50 °C	Ta = +55 °C	Ta = +40 °C	Ta = +50 °C	Ta = +55 °C
18 W Compact Fluorescent	T6	T6	T6	T6	T5	T5
150 W Halogen	T4	T4	T4	T4	T3	T3
70 W High Pressure Sodium	T5	T4	T4	T4	T4	T4
100 W High Pressure Sodium	T3	T3	T3	T3	T3	T3
150 W High Pressure Sodium	T3	T3	T3	T3	T3	T3
80 W Mercury	T4	T4	T4	T4	T4	T4
125 W Mercury	T3	T3	T3	T3	T3	T3
160 W Mixed	T3	T3	T3	T3	T3	T3
100 and 200 W Incandescent	T4	T3	T3	T3	T3	T3

Surface Temperature for Dust

Lamp Type and Wattage	Ambient Temperature for Ta = +55 °C	
	Lighting Downward	Lighting Upward
18 W Compact Fluorescent	+80 °C	+95 °C
150 W Halogen	+130 °C	+195 °C
70 W High Pressure Sodium	+130 °C	+130 °C
100 W High Pressure Sodium	+184 °C	+184 °C
150 W High Pressure Sodium	+184 °C	+184 °C
80 W Mercury	+130 °C	+130 °C
125 W Mercury	+195 °C	+195 °C
160 W Mixed	+195 °C	+195 °C
100 and 200 W Incandescent	+195 °C	+195 °C

Flameproof Wellglass Luminaires for Hazardous Areas – Ex de IIC – LDM Series

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

Lamp Wattages	Voltage (+/- 10%)	Lamp Type ④		Weight kg	Volume dm³	Catalog Number
		Ellipsoidal	Tubular			
High Pressure Sodium						
70 W ①②	230/240 Vac, 50 Hz	X	X	9	30	LDML70AG1XJ
100 W ①	230/240 Vac, 50 Hz	X	X	9	30	LDML10AG1XJ
150 W ①	230/240 Vac, 50 Hz	X	X	9	30	LDML15AG1XJ
Metal Halide						
100 W ①	230/240 Vac, 50 Hz	X	X	9	30	LDMH10AG1XJ
150 W ①	230/240 Vac, 50 Hz	X	X	9	30	LDMH15AG1XJ
Mercury Vapor						
80 W ①	230/240 Vac, 50 Hz	–	–	9	30	LDMM80AG1XJ
125 W ①	230/240 Vac, 50 Hz	–	–	9	30	LDMM12AG1XJ
Compact Fluorescent						
18 W	–	–	–	7.5	30	LDMF18AG1
Incandescent						
200 W max. ③	–	–	–	7.5	30	LDMI20AG1






① Ballast supplied. ② For lamp with built-in ignitor. ③ 150 W halogen or 160 W mixed lamps can be used. ④ Only with lamp operating in any position.

LDM Series Wellglass Luminaires

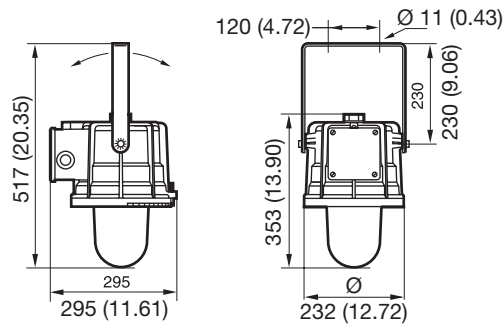
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Accessories

Description	Weight kg	Volume dm ³	Catalog Number
Protective Guard			
 Zinc plated steel protective guard	0.4	9	LDPG1Z
External Reflector			
 External white polyester reflector	3.2	97	LDER1P
Hinged Bracket			
 Zinc plated steel hinged bracket for installation on flat surface	3.4	3	LDMHBZ
Eyebolt			
 Zinc plated steel M10 eyebolt for suspension	0.4	0.2	LDRBM10Z
Mounting Strap			
 Gray painted aluminum	0.9	0.6	LDMSBA

Dimensions in Millimeters (Inches) – LDM Version with Hinged Bracket



Shaded catalog numbers are normally stocked items. All other items are made to order.

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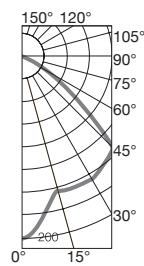
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Photometric Data

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

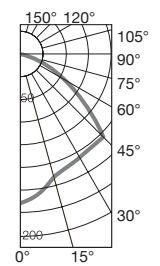
70 W High Pressure Sodium
Efficiency 54.4%
NF C 71-121: 0.54 F

CANDELA DISTRIBUTION		
	90-270	0-180
0	195	195
5	179	179
10	166	166
15	151	151
20	149	149
25	153	153
30	156	156
35	157	157
40	158	158
45	159	159
50	148	148
55	116	116
60	77	77
65	54	54
70	37	37



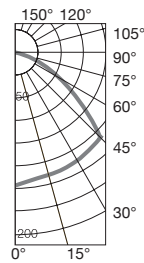
80 W Mercury
Efficiency 46.8%
NF C 71-121: 0.47 F

CANDELA DISTRIBUTION		
	90-270	0-180
0	158	158
5	154	154
10	145	145
15	138	138
20	136	136
25	135	135
30	134	134
35	133	133
40	133	133
45	133	133
50	125	125
55	98	98
60	67	67
65	45	45
70	31	31



125 W Mercury
Efficiency 48%
NF C 71-121: 0.48 F

CANDELA DISTRIBUTION		
	90-270	0-180
0	147	147
5	143	143
10	138	138
15	133	133
20	133	133
25	136	136
30	138	138
35	137	137
40	136	136
45	134	134
50	126	126
55	104	104
60	74	74
65	50	50
70	32	32



150 W High Pressure Sodium
Efficiency 59.3%
NF C 71-121: 0.59 D

CANDELA DISTRIBUTION		
	90-270	0-180
0	19.72	19.72
5	18.82	17.47
10	21.50	19.13
15	25.63	23.75
20	32.78	30.06
25	40.19	36.76
30	47.77	43.14
35	55.50	48.77
40	67.88	59.97
45	77.18	66.78
50	81.09	71.22
55	87.05	74.58
60	90.17	77.82
65	92.66	79.70
70	94.77	81.16
75	95.68	82.02
80	96.17	82.11
85	96.18	81.94
90	95.10	80.31

