Standard and Emergency Back-Up. Zone 2 and 22

ATEX/IEC: Zone 2 and 22 ₩ II 3 GD

Applications

- Light duty luminaire ideal for commercial and light industrial locations including hazardous areas designated as Zone 2 or 22 environments.
- Typical applications include oil refineries, petrochemical plants, pulp and paper mills, tunnels and other light duty manufacturing locations.

- Utilizes two 26 mm (T8) bi-pin fluorescent lamps.
- Fiberglass reinforced polyester housing.
- Instant start 95% power factor ballast.
- Available in various lengths and wattages ranging from 18 to 58.
- Pre-impregnated fiberglass reinforced white polyester housing.
- Closing system using stainless steel clips.
- Electrostatically applied white powder painted steel reflector provides optimal lighting distribution.
- Poured-in-place elastomer gasket secures IP65/67 ingress protection.
- Available in 3 hours emergency version, including multi-tap ballast with built-in monthly self test. Test results through multicolored LED display.
 - Optional plug-in battery pack
 - Easy to remove for maintenance.
 - Battery voltage is 6 volts and 4 Ah capacity.
 - One fluorescent tube remains lit for up to 3 hours and up to 29% light intensity for 18 Watt, 15% for 36 Watt and 9% for
- All emergency units supplied with cut off switch to battery when fixture is opened.

Standard Material

- · Housing: fiberglass reinforced polyester (FRP)
- Lens and lampholders: polycarbonate
- Reflector: white powder painted sheet steel
- Gasket: elastomer
- Mounting accessories available in different materials such as gray painted aluminum, zinc plated steel, galvanized steel or 316 stainless steel

Options

- Silicone coating for added protection in H₂S hydrogen sulfide environments. Add suffix -C.
- 3 hours emergency version. Add suffix -E.
- Without safety switch. Add suffix -N.
- 4 entries. Add suffix -X.

ATEX/IEC Certifications and Compliances

- Certification Type: EFn (Standard Version); EFn-EM (Emergency Version)
 - Gas: Zone 2
 - Conforming to ATEX 94/9/CE: CE W II 3 G
 - ATEX/IEC Protection: Ex nR II or Ex nA II
 - T Rating: T4 for nA protection mode.
 - See temperature chart for nR protection mode
 - Dust: Zone 22
 - Conforming to ATEX 94/9/CE: CE W II 3 D
 - ATEX/IEC Protection: Ex tD A22
 - Surface Temperature: See Temperature Chart on following
- Ambient Temperature: -20 °C to +55 °C (-4 °F to 131 °F)





- CE Declaration of Conformity: 50213/50219
- ATEX Certificate: LCIE 08.6005X/LCIE 08.6063X
- IECEx Certificate: LCIE Ex 08.007X/LCIE Ex 08.008X
- Index of Protection (solid and liquid): IP65/67
- Time Before Opening: 10 minutes Ex Standards: EN/IEC 60079-15; 61241-0; 61241-1
- Product Standards: EN/IEC 60598-1; 60598-2-22
- EMC Standards: EN/IEC 55015; 61547
- Other Standards: EN/IEC 60529 (IP)

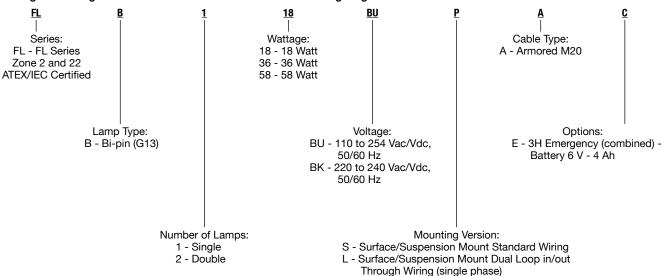


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Order using catalog numbering guide below or select catalog number from tables on following pages.

Catalog Numbering Guide — FL Series Non-Metallic Fluorescent Lighting Fixtures



Temperature Chart

	Dust		Gas	
Version	Surface Temperature	T Rating for Ta = +40 °C (+104 °F)	T Rating for Ta = +50 °C (+122 °F)	T Rating for Ta = +55 °C (+131 °F)
1 x 18 W	. 75 °C (. 167 °C)	Т6	Т6	Т6
2 x 18 W	+75 °C (+167 °F)	Т6	Т5	Т5
1 x 36 W	.00 % (.101 %)	Т6	Т6	Т5
2 x 36 W	+83 °C (+181 °F)	Т6	Т6	Т5
1 x 58 W	.01 %0 /.106 %5	Т5	Т5	T5
2 x 58 W	+91 °C (+196 °F)	Т5	Т5	Т5

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Standard Version for Armored and Unarmored Cable

Supplied with one M20 cable entry at each end plus two locknuts, two earth continuity and one blanking plug. Equipped with one 2 x - 3 x 2.5 mm² (0.004 x 0.003 in²) maximum flexible or rigid connection terminal block.

Number of Lamps	Wattage	Voltage (V)	Weight kg (lbs)	Volume dm³ (in³)	Catalog Number
1	18	220/240	2.3 (5.07)	22.3 (1360.83)	FLB118BKSA
2	18	220/240	2.3 (5.07)	22.3 (1360.83)	FLB218BKSA
2	18	110/254	2.3 (5.07)	22.3 (1360.83)	FLB218BUSA
1	36	220/240	2.8(6.17)	38.0 (2318.90)	FLB136BKSA
1	36	110/254	2.8(6.17)	38.0 (2318.90)	FLB136BUSA
2	36	220/240	3.6 (7.94)	38.0 (2318.90)	FLB236BKSA
2	36	110/254	3.6 (7.94)	38.0 (2318.90)	FLB236BUSA
1	58	220/240	3.4 (7.50)	45.0 (2746.07)	FLB158BKSA
1	58	110/254	3.4 (7.50)	45.0 (2746.07)	FLB158BUSA
2	58	220/240	4.4 (9.70)	45.0 (2746.07)	FLB258BKSA
2	58	110/254	4.4 (9.70)	45.0 (2746.07)	FLB258BUSA

Emergency Version for Armored and Unarmored Cable

Supplied with one M20 cable entry with earth continuity at each end and two M20 locknuts and one blanking plug. Equipped with one $2 \times -5 \times 2.5$ mm² (0.008 x 0.003 in²) maximum flexible or rigid connection terminal block.

Number of Lamps	Wattage	Voltage (V)	Weight kg (lbs)	Volume dm³ (in³)	Catalog Number
2	18	110/254	4.5 (9.92)	22.3 (1360.83)	FLB218BUSAE
2	36	110/254	7.0 (15.43)	38.0 (2318.90)	FLB236BUSAE
2	58	110/254	7.5 (16.53)	45.0 (2746.07)	FLB258BUSAE

② To add silicone coating for added protection in H2S hydrogen sulfide environments. add suffix -C at the end of the catalog number. For 3H emergency (combined) - battery V - 4 Ah, add suffix -E at the end of the catalog number. For unit without safety switch, add suffix -N at the end of the catalog number. For unit with 4 entries, add suffix -X at the end of the catalog number.



① Surface/suspension mount with standard wiring standard. For surface/suspension mount with dual loop in/out through wiring (single phase), replace the letter **S** in the 9th position with the letter **L**; example: FLB118BK**L**A.

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	Description	Catalog Number
Fixing Brackets		
	Set of two brackets for surface installation	
	Zinc plated steel	FEFBZ
	316 stainless steel	FEFBS
Brackets for Surface Mounting		
	Set of two	
	Aluminium (gray painted)	FESBA
	316 stainless steel	FESBS
M8 Ring Bolts		
	Set of two	
\bigcirc	Zinc plated steel	FERBM8Z
Half Clamps Brackets for Pole Mo		
	Set of two	
	Diameter: 42 to 49 mm (1.65 to 1.93") pole — 31.8 to 38.1 mm	
	Zinc plated steel	FEHC49Z
	316 stainless steel	FEHC49S
	Diameter: 60 mm (2.36") pole — 50.8 mm (2") tube	
	Zinc plated steel	FEHC60Z
	316 stainless steel	FEHC60S
Hinged Brackets		
ര	Set of two brackets for adjusting luminaire	
	Aluminium	FEHBA
	316 stainless steel	FEHBS
all Prevention Kit		
	Retains fixture temporarily to ease installation. For M20 cable e	ntry
	1.20 meter (3.94 foot) stainless steel chain	FDSCS

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Emergency Function Diagram - Emergency Function 2 Tubes

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Mains	Lighting Switch ON	Lighting Switch OFF
Fluorescent Luminaire ON		
Fluorescent Luminaire OFF		

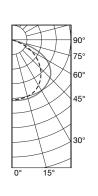
Photometric Data

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

— — — Longitudinal Transverse

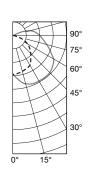
1 x 18 W Efficiency 67.8% NF C 71–121: 0.58 H + 0.09 T

CAI	CANDELA DISTRIBUTION		
	0-180	90-270	
0	142	142	
5	142	142	
10	139	140	
15	135	135	
20	130	132	
25	123	128	
30	113	126	
35	102	128	
40	90	132	
45	78	136	
50	66	134	
55	54	131	
60	43	129	
65	33	119	
70	23	110	



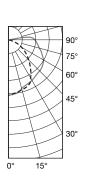
2 x 16 W Efficiency 68.9% NF C 71–121: 0.60 H + 0.09 T
CANDELA DISTR
0.100

CAI	CANDELA DISTRIBUTION			
	0-180	90-270		
0	116	116		
5	115	119		
10	113	133		
15	110	150		
20	105	156		
25	100	157		
30	94	158		
35	88	159		
40	81	158		
45	74	157		
50	65	152		
55	55	145		
60	45	137		
65	35	128		
70	25	114		



2 x 36 W Efficiency 64.1% NF C 71–121: 0.57 H + 0.07 T

CANDELA DISTRIBUTION			
UA!	0–180	90-270	
0	163	163	
5	162	162	
10	160	159	
15	155	145	
20	149	140	
25	142	139	
30	132	139	
35	120	138	
40	104	134	
45	80	133	
50	60	129	
55	50	125	
60	40	120	
65	31	108	
70	23	95	



2 x 58 W Efficiency 63.6% NF C 71-121: 0.56 H + 0.07 T

CANDELA DISTRIBUTION			
	0-180	90-270	
0	160	160	
5	159	160	
10	157	157	
15	153	146	
20	148	140	
25	141	139	
30	132	139	
35	121	138	
40	107	134	
45	85	132	
50	68	127	
55	56	122	
60	45	117	
65	35	107	
70	24	90	

