

FL Series Light Duty Non–Metallic Fluorescent Luminaires

Standard and Emergency Back-Up. Zone 2 & 22

Zone 2 and 22
Gas (G) and Dust (D)

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.

Features

- 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.

Standard Material

- Fiberglass reinforced polyester (FRP) housing
- Polycarbonate lens
- White powder painted sheet steel reflector
- Elastomer gasket
- Polycarbonate lampholders
- Mounting accessories available in different materials such as gray painted aluminum, zinc plated steel, galvanized steel or 316 stainless steel

Options

- Available in 3 hours emergency version, including multi-tap ballast with built-in monthly self test. Test results through multi-colored LED.
- Plug-in battery pack is 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 58 Watt.
- All emergency units supplied with cut off switch to battery when fixture is opened.



2 x 58 W



2 x 18 W

Certifications and Compliances

◆ ATEX Certification

- **Certification Type: EFn (Standard Version) / EFn-EM (Emergency Version)**
 - Gas: Zone 2
 - Conforming to ATEX 94/9/CE: Ⓔ II 3 G
 - Type of Protection: Ex nR II or Ex nA II
 - T Rating: T4 for nA protection mode. (T3 for 2x58W Version)
See temperature chart for nR protection mode
 - Dust: Zone 22
 - Conforming to ATEX 94/9/CE: Ⓔ II 3 D
 - Type of Protection: Ex tD A22
 - Surface Temperature: See Table on following page
 - Ambient Temperature: -20 °C to +55 °C
 - CE Declaration of Conformity: 50213/50219
 - ATEX Certificate:
 - EFn (Standard Version): LCIE 08.6005X
 - EFn-EM (Emergency Version): LCIE 08.6063X
 - Index of Protection (solid & liquid): IP65 / 67

◆ EURASEC Certification

- EURASEC N° TC RU C-FR.Г505.B.00912

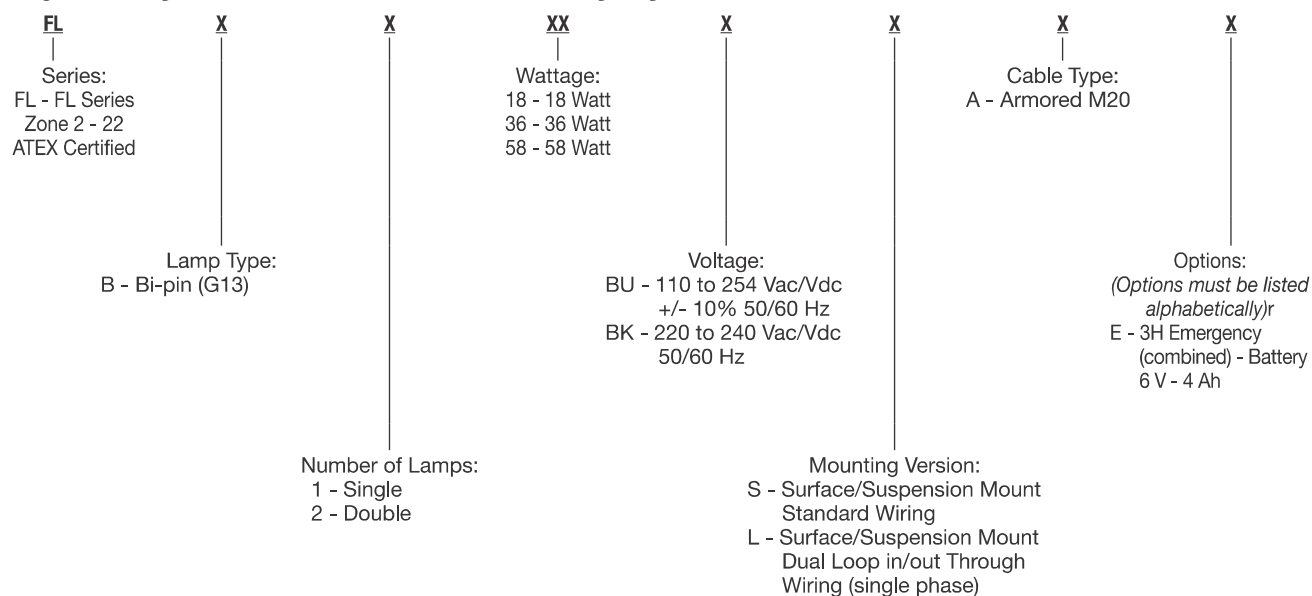
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Order using catalog numbering guide below or select catalog number from tables on following pages.

Catalog Numbering Guide For FL Non-Metallic Fluorescent Lighting Fixtures



Temperature Chart

Version	Dust		Gas	
	Surface Temp. for Ta = +55° C	T Rating for Ta = 40° C	T Rating for Ta = 50°C	T Rating for Ta = 55°C
1 x 18 W	75°C	T6	T6	T6
2 x 18 W		T6	T5	T5
1 x 36 W	83°C	T6	T6	T5
2 x 36 W		T6	T6	T5
1 x 58 W	91°C	T5	T5	T5
2 x 58 W		T5	T5	T5

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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.
Also supplied with one 2 x (3 x 2.5 mm²) max. flexible or rigid connection terminal block.

Number of Lamps	Watts	Voltage (V)	Weight kg	Volume dm ³	Pack.	Catalog Number
1	18	220/240	2.3	22.3	1	FLB118BKSA
2	18	220/240	2.3	22.3	1	FLB218BKSA
2	18	110/254	2.3	22.3	1	FLB218BUSA
1	36	220/240	2.8	38	1	FLB136BKSA
1	36	110/254	2.8	38	1	FLB136BUSA
2	36	220/240	3.6	38)	1	FLB236BKSA
2	36	110/254	3.6	38	1	FLB236BUSA
1	58	220/240	3.4	45	1	FLB158BKSA
1	58	110/254	3.4	45	1	FLB158BUSA
2	58	220/240	4.4	45	1	FLB258BKSA
2	58	110/254	4.4	45	1	FLB258BUSA

Emergency Version for Armored and Unarmored Cable

Supplied with one M20 entries with earth continuity at each end. Also supplied with two M20 locknuts and one blanking plug.
Equipped with one 2 x (5 x 2.5 mm²) max. flexible or rigid connection terminal block


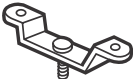



Number of Lamps	Watts	Voltage (V)	Weight kg	Volume dm ³	Pack.	Catalog Number
2	18	110/254	4.5	22.3	1	FLB218BUSAE
2	36	110/254	7.0	38	1	FLB236BUSAE
2	58	110/254	7.5	45	1	FLB258BUSAE

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

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Accessories and Replacement Parts		
	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	
	Zinc plated steel	FERBM8Z
Half Clamps Brackets for Pole Mounting		
	Set of two	
	For 42 mm to 49 mm pole (1-1/4 to 1-1/2" tube)	
	Zinc plated steel	FEHC49Z
	316 stainless steel	FEHC49S
	For 60 mm pole (2" tube)	
	Zinc plated steel	FEHC60Z
	316 stainless steel	FEHC60S
Hinged Brackets		
	Set of two brackets for adjusting luminaire	
	Aluminium	FEHBA
	316 stainless steel	FEHBS
Fall Prevention Kit		
	Safety chain retains fixture temporarily to ease installation	
	For M20 cable entry	FESCM20

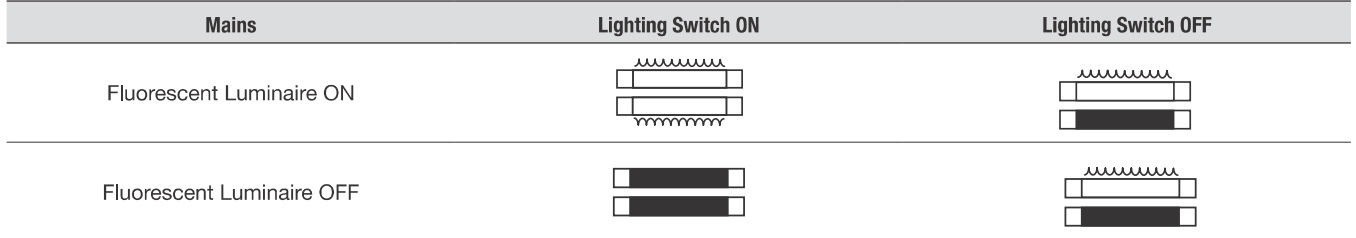
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Emergency Function Diagram – Emergency Function 2 Tubes



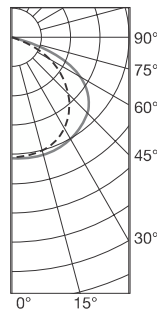
Photometric Data

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

--- Longitudinal
— Transverse

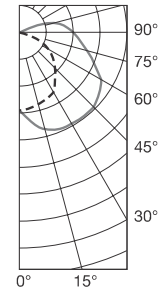
1 x 18 W
Efficiency 67.8%
NF C 71-121: 0.58 H + 0.09 T

	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



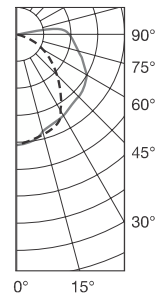
2 x 18 W
Efficiency 68.9%
NF C 71-121: 0.60 H + 0.09 T

	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	
	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

