

**Lighting:** Fluorescent Lighting

**FL Series:** Light Duty Nonmetallic Fluorescent Lighting Fixtures, Standard and Emergency Battery Back-Up – Zone 2 & 22



2 x 58 W



2 x18 W

**Compliance Data:**

ATEX – IEC:



Zone 2 – 22	ATEX	II 3 GD	IEC	CE
Ex nR II or nA II	T6 or T5 or T4	Ex tD A22	T80°C to 100°C	IP65/67

**Power and Voltage:**

18 W / 36 W / 58 W	1 & 2 Lamp Versions	Multiple Voltages	Lamp Type: Fluorescent T8 (G13)
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**Operating Temperatures:**

-20°C to +55°C
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Zone 2 & 22

II 3 GD

ATEX - IEC IP65/67

### 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 of Fixtures:

- Fiberglass reinforced polyester (FRP) housing.
- Polycarbonate lens.
- White powder painted sheet steel reflector.
- Elastomer gasket.
- Polycarbonate lampholders.

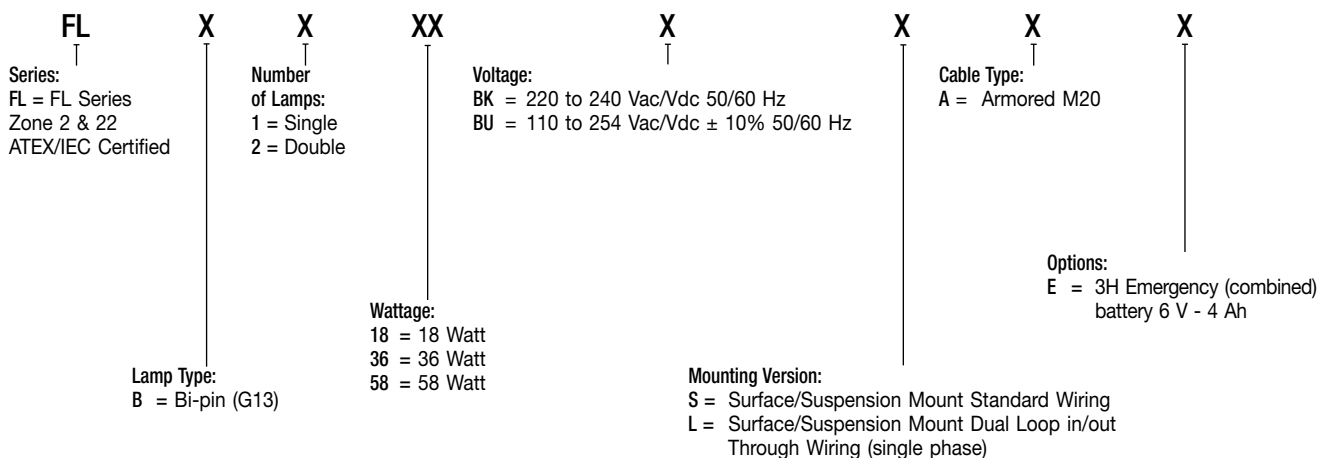
### Standard Material of Mounting Accessories:

- 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.

### Catalog Number Logic:



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### Ordering Information:

### 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 mm<sup>2</sup>) max. flexible or rigid connection terminal block.






Number of Lamps	Watts	Voltage (V)	Weight (kg)	Volume (dm <sup>3</sup> )	Catalog Number	Old Catalog Number	Pack.
1	18	220/240	2.3	22.3	FLB118BKSA	300244	1
2	18	220/240	2.3	22.3	FLB218BKSA	300245	1
2	18	110/254	2.3	22.3	FLB218BUSA	300145	1
1	36	220/240	2.8	38	FLB136BKSA	300246	1
1	36	110/254	2.8	38	FLB136BUSA	300146	1
2	36	220/240	3.6	38	FLB236BKSA	300247	1
2	36	110/254	3.6	38	FLB236BUSA	300147	1
1	58	220/240	3.4	45	FLB158BKSA	300248	1
1	58	110/254	3.4	45	FLB158BUSA	300148	1
2	58	220/240	4.4	45	FLB258BKSA	300249	1
2	58	110/254	4.4	45	FLB258BUSA	300149	1

### 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 mm<sup>2</sup>) max. flexible or rigid connection terminal block

Number of Lamps	Watts	Voltage (V)	Weight (kg)	Volume (dm <sup>3</sup> )	Catalog Number	Old Catalog Number	Pack.
2	18	110/254	4.5	22.3	FLB218BUSAE	300235	1
2	36	110/254	7.0	38	FLB236BUSAE	300237	1
2	58	110/254	7.5	45	FLB258BUSAE	300239	1

### Accessories:

Description	Catalog Number	Old Catalog Number	Description	Catalog Number	Old Catalog Number	
<b>Half Clamp Brackets for Pole Mounting</b>			<b>Hinged Brackets</b>			
Set of two			Set of two brackets for adjusting luminaire			
	Dia. 42 to 49 mm pole (1-1/4" to 1-1/4" tube)			Aluminum (gray painted)		
	Zinc plated steel	FEHC49Z		096593	FEHBA	096598
	316 stainless steel	FEHC49S		096793	FEHBS	096574
	Zinc plated steel	FEHC60Z	096591			
	316 stainless steel	FEHC60S	096791			
<b>M8 Ring Bolts</b>			<b>Fixing Brackets</b>			
Set of two			Set of two brackets for ease of surface installation			
	Zinc plated steel			Zinc plated steel		
		FERBM8Z		096594	FEFBZ	096596
				316 stainless steel	FEFBS	096589
<b>Brackets for Surface Mounting</b>			<b>Fall Prevention Kit</b>			
Set of two			Retains fixture temporarily to ease installation			
	Aluminum (gray painted)		For M20 cable entry		FESCM20	096406
	316 stainless steel					

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### Compliances:

Hazardous Area	Gas	Dust
Certification Type	EFn (Standard Version) / EFn-EM (Emergency Version)	
Zones	2	22
Conforming to ATEX 94/9/CE	CE II 3G	CE II 3D
Symbol of Protection ATEX	Ex nR II or Ex nA II	Ex tD A22
Symbol of Protection IEC		
T Rating	T4 for nA protection mode. See temperature chart for nR protection mode	N.A.
Surface Temperature	N.A.	See Temperature Chart
Ambient Temperature	$-20^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$	
CE Declaration of Conformity	50213/50219	
ATEX Certificate	LCIE 08.6005X / LCIE 08.6063X	
IEC Certificate	LCIE Ex 08.007X / LCIE Ex 08.008X	
Other Certifications	—	
Index of Protection (solid and liquid)	IP65 / 67	
Impact Resistance (shock)	—	
Time Before Opening	10mn	

### Standards:

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)

### Temperature Chart:

Version	Dust	Gas		
	Surface Temp.	T Rating for $T_a = +40^{\circ}\text{C}$	T Rating for $T_a = +50^{\circ}\text{C}$	T Rating for $T_a = +55^{\circ}\text{C}$
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

### Emergency Function Diagram:

#### Emergency function 2 tubes

	Main power on	Main power off
Fluorescent luminaire ON		
Fluorescent luminaire OFF		

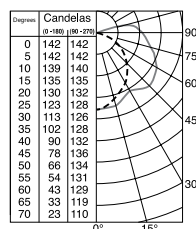
### Photometric Data:

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

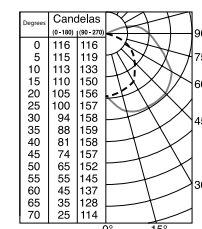
Luminaire symbol according to NF C 71-121

--- Longitudinal  
— Transverse

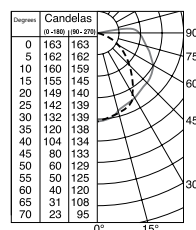
**1 x 18 W**  
Efficiency 67.8%  
NF C 71-121: 0.58 H + 0.09 T



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



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



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

