### Standard and Emergency Battery Back-Up. Increased Safety

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

#### **Applications**

- Can be installed in hazardous areas designated as Zone 1 and 2 – 21 and 22.
- For use in locations where a high degree of corrosion resistance is required.
- For indoor/outdoor use where protection against dirt, water and moisture is necessary.
- Typical applications include oil refineries, petrochemical facilities, pulp and paper mills, food processing plants, warehouses, underground tunnels and general manufacturing facilities, FPSO, FLNG, ...

#### Features

- Corrosion-resistant fiberglass reinforced polyester body and hinged polycarbonate lens.
- High impact resistance housing (20 Joules IK10) from -40°C to +55 °C ambient temperature and wind profile for use in extreme offshore and onshore environments.
- Latch assembly and elastomer gasket seals against water and dust ingress, IP66/67.
- Easily accessed for maintenance using Allen key or straight blade screwdriver.
- Central opening with unique patented release system to prevent damage.
- Can be horizontally or vertically mounted.
- Hinged parabolic reflector for high lumen output efficiency.
- Vibration resistant spring loaded lampholders for bi-pin (G13).
- Positive safety switch disconnects power to lamps and ballast to allow maintenance in hazardous locations.
- Electronic multi-tap ballast 110 to 254 Vac/Vdc +/- 10% 50/60
  Hz, for global applications. High power factor electronic ballast
  (>0.95). EOL (End Of Life) protection in accordance to the latest
  EN/IEC 60079-7 standard.
- Two channel ballast prevents dark areas by allowing one lamp to remain lit if one fails.
- Ballast plug-in with Ex e connector for quick and error-free maintenance.
- Available in 3 hour or 90 minute emergency versions, including multi-tap ballast with built-in monthly self test. Test results through multi-colored LED.
- Ex e battery with plug-in connector.

#### **Standard Materials**

- · Fiberglass reinforced polyester housing
- Polycarbonate lens
- Elastomer gasket
- · Highly reflective white polycarbonate internal reflector
- 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 H<sub>2</sub>S hydrogen sulfide environments.
- Available without safety switch.
- · Level gauge light fitting.
- 316 stainless steel fixing inserts.



2 x 58 W



2 x 36 W



2 x 18 W

#### **Certifications and Compliances**

#### **♦ATEX/IECEx Certification**

- Certification Type: FLe
  - Gas: Zones 1 and 2:
  - Conforming to ATEX 94/9/CE: <sup>™</sup> II 2 G
  - Type of Protection: Ex de IIC or Ex demb IIC (emergency version)
  - Temperature Class: T5 ② to T4
  - Dust: Zone 21 and 22:
  - Conforming to ATEX 94/9/CE: ᠍ II 2 D
  - Type of Protection: Ex t IIIC Db
  - Surface Temperature: +75 °C
  - Ambient Temperature: -40 °C to +55 °C
  - CE Declaration of Conformity: 50201
  - ATEX Certificate: LCIE 07 ATEX 6017
  - IECEx Certificate: IECEx LCI 04.0017
  - Index of Protection according EN/IEC 60529: IP66/67
  - Impact Resistance (shock): IK10

#### **♦ EURASEC Certification**

— EURASEC N° TC RU C-FR.гь05.В.00910

#### ♦ Others Certification

INMETRO Certificate: BVC11,0276 <sup>⊕</sup>



① Inmetro certification available on special request only. Contact your local sales for more information .

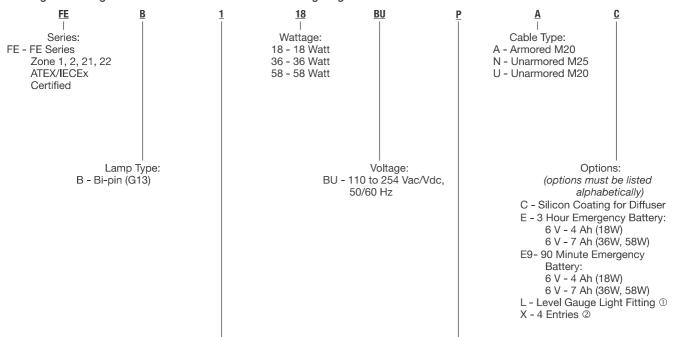
<sup>2</sup> With ceiling position use at +40 °C ambient temperature.

Standard and Emergency Battery Back-Up. Increased Safety

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

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

Catalog Numbering Guide — FE Non-Metallic Fluorescent Lighting Fixtures



Number of Lamps:

- 1 Single
- 2 Double
- 3 Three Lamps

Mounting Version:

- P Pole Mount 3
- S Surface/Suspension Mount Standard Wiring
- T Surface/Suspension Mount Through Wiring
- L Surface/Suspension Mount Dual Loop in/out Through Wiring (single phase)

① Only for single standard versions.

② Only for S, T and L mounting versions.

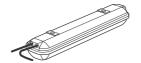
<sup>3</sup> Only 2 x 18 W and 2 x 36 W with M25 entry versions.

Standard and Emergency Battery Back-Up. Increased Safety

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

#### Surface/Suspension Mounting and Standard Wiring Version

Connection via 1 x 6 terminals. Capacity (flexible/solid): 4 mm<sup>2</sup>/6 mm<sup>2</sup>.





#### Unarmored Version - Bi-pin (G13)

Three M25 threaded entries, two at one end and one at opposite end, supplied with one M25 polyamide cable gland - 8 to 18.5 mm diameter - and two M25 polyamide plugs.

1 /	9			1 7 1 5	,	
Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Catalog Number
1	18	G13	110/254	5.5	32.3	FEB118BUSN
2	18	G13	110/254	5.5	32.3	FEB218BUSN
1	36	G13	110/254	7.9	54.2	FEB136BUSN
2	36	G13	110/254	7.9	54.2	FEB236BUSN
3	36	G13	110/254	9.9	54.2	FEB336BUSN
1	58	G13	110/254	9.0	65.0	FEB158BUSN
2	58	G13	110/254	9.0	65.0	FEB258BUSN
3	58	G13	110/254	11.0	65.0	FEB358BUSN

#### Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 plugged clearance entry, supplied with two M20 polyamide plugs.

Number	Power	Lamp	Voltage	Weight	Volume	
of Lamps	(W)	Туре	(V)	kg	dm <sup>3</sup>	Catalog Number
1	18	G13	110/254	5.5	32.3	FEB118BUSA
2	18	G13	110/254	5.5	32.3	FEB218BUSA
1	36	G13	110/254	7.9	54.2	FEB136BUSA
2	36	G13	110/254	7.9	54.2	FEB236BUSA
3	36	G13	110/254	9.9	54.2	FEB336BUSA
1	58	G13	110/254	9.0	65.0	FEB158BUSA
2	58	G13	110/254	9.0	65.0	FEB258BUSA
3	58	G13	110/254	11.0	65.0	FEB358BUSA

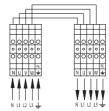
### Standard and Emergency Battery Back-Up. Increased Safety

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

# Surface/Suspension Mounting and Through Wiring Version (three phase)

Connection via 2 x 5 terminals. Capacity (flexible/solid): 4 mm<sup>2</sup>/6 mm<sup>2</sup>.





#### Unarmored Version - Bi-pin (G13)

Three M25 threaded entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands - 8 to 18.5 mm diameter - and one M25 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BUTN
2	36	G13	110/254	7.9	54.2	FEB236BUTN
2	58	G13	110/254	9.0	65.0	FEB258BUTN

#### Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

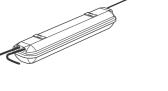
Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BUTA
2	36	G13	110/254	7.9	54.2	FEB236BUTA
2	58	G13	110/254	9.0	65.0	FEB258BUTA

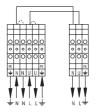
# Surface/Suspension Mounting and Dual Loop In/Out Through Wiring Version (single phase):

Connection via 1 x 6 terminals and 1 x 3 terminals. Capacity (flexible/solid): 4 mm²/6 mm².

### Unarmored Version - Bi-pin (G13)

Three M25 entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands - 8 to 18.5 mm diameter - and one M25 polyamide plug.





Number	Power	Lamp	Voltage	Weight	Volume	
of Lamps	(W)	Type	(V)	kg	dm³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BULN
2	36	G13	110/254	7.9	54.2	FEB236BULN
2	58	G13	110/254	9.0	65.0	FEB258BULN

#### Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BULA
2	36	G13	110/254	7.9	54.2	FEB236BULA
2	58	G13	110/254	9.0	65.0	FEB258BULA

### Standard and Emergency Battery Back-Up. Increased Safety

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

Pole Mounting Version
Connection via 1 x 3 terminals. Capacity (flexible/solid): 4 mm<sup>2</sup>/6 mm<sup>2</sup>.

For mounting on 42 mm diameter pole or tubular wallmounting support.

Supplied with one integrated M25 polyamide cable gland — 8 to 18.5 mm diameter.





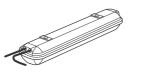
Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Catalog Number
2	18	G13	110/254	6.2	34.1	FEB218BUPN
2	36	G13	110/254	8.7	54.2	FEB236BUPN

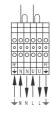
#### Level Gauge Tank Light -Surface/Suspension Mounting with Standard Wiring Connection via 1 x 6 terminals.

Capacity (flexible/solid): 4 mm²/6 mm².

#### Unarmored Version - Bi-pin (G13)

Three M25 entries, two at one end and one at opposite end, supplied with one M25 polyamide cable gland — 8 to 18.5 mm diameter — and two M25 polyamide plugs.





Out to Nove to	Volume	Weight	Voltage	Lamp	Power	Number
Catalog Number	dm <sup>3</sup>	kg	(V)	Туре	(W)	of Lamps
FEB118BUSNL	32.3	5.5	110/254	G13	18	1
FEB136BUSNL	54.2	7.9	110/254	G13	36	1
FEB158BUSNL	65.0	9.0	110/254	G13	58	1
	· ·					

Standard and Emergency Battery Back-Up. Increased Safety

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

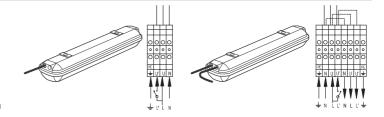
#### **Emergency Battery Backup**

#### Surface/Suspension Mounting and Standard Wiring

Connection via 1 x 4 terminals for 18 W version. Connection via 1 x 8 terminals for 36 W and 58 W versions. Capacity (flexible/solid): 4 mm²/6 mm².



Three M25 entries, two at one end and one at opposite end, supplied with one M25 polyamide cable gland - 8 to 18.5 mm diameter - and two M25 polyamide plugs.



Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	G13	110/254	7.3	32.3	3 H	4Ah	FEB218BUSNE
2	36	G13	110/254	9.6	54.2	3 H	7Ah	FEB236BUSNE
3	36	G13	110/254	11.6	54.2	3 H	7Ah	FEB336BUSNE
2	58	G13	110/254	10.7	65.0	3 H	7Ah	FEB258BUSNE
3	58	G13	110/254	12.7	65.0	3 H	7Ah	FEB358BUSNE

#### Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 plugged clearance entry, supplied with two M20 polyamide plugs.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	G13	110/254	7.3	32.3	3 H	4Ah	FEB218BUSAE
2	36	G13	110/254	9.6	54.2	3 H	7Ah	FEB236BUSAE
3	36	G13	110/254	11.6	54.2	3 H	7Ah	FEB336BUSAE
2	58	G13	110/254	10.7	65.0	3 H	7Ah	FEB258BUSAE
3	58	G13	110/254	12.7	65.0	3 H	7Ah	FEB358BUSAE

Standard and Emergency Battery Back-Up. Increased Safety

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

#### **Emergency Battery Backup**

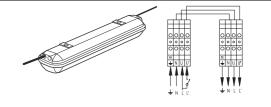
#### Surface/Suspension Mounting and Through Wiring Version

Connection via 2 x 4 terminals.

Capacity (flexible/solid): 4 mm<sup>2</sup>/6 mm<sup>2</sup>.

#### Unarmored Version - Bi-pin (G13):

Three M25 entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands  $-\ 8$  to 18.5 mm diameter  $-\$ and one M25 polyamide plug.



Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	7.3	32.3	3 H	4Ah	FEB218BUTNE
2	36	Bi-pin	110/254	9.6	54.2	3 H	7Ah	FEB236BUTNE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BUTNE

#### Armored Version - Bi-pin (G13):

Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	7.3	32.3	3 H	4Ah	FEB218BUTAE
2	36	Bi-pin	110/254	9.6	54.2	3 H	7Ah	FEB236BUTAE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BUTAE

Appleton

### Standard and Emergency Battery Back-Up. Increased Safety

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

#### **Emergency Battery Backup**

#### Surface/Suspension Mounting and Dual Loop In/Out Through Wiring Version (single phase)

Connection via 1 x 4 double deck terminals for 18 W version.

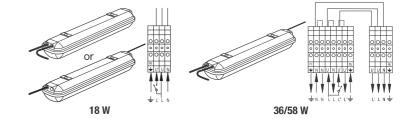
Connection via 1 x 8 terminals and 1 x 4 terminals for 36 W and 58 W versions.

Capacity (flexible/solid):

4 mm<sup>2</sup>/6 mm<sup>2</sup>

#### Unarmored Version - Bi-pin (G13)

Three M25 entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands - 8 to 18.5 mm diameter — and one M25 polyamide plug.



Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	7.6	32.3	3 H	4Ah	FEB218BULNE
2	36	Bi-pin	110/254	9.9	54.2	3 H	7Ah	FEB236BULNE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BULNE

#### Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	7.6	32.3	3 H	4Ah	FEB218BULAE
2	36	Bi-pin	110/254	9.9	54.2	3 H	7Ah	FEB236BULAE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BULAE

#### **Pole Mounting Version**

Connection via 1 x 4 terminals. Capacity (flexible/solid): 4 mm<sup>2</sup>/6 mm<sup>2</sup>.





36 W - Actual Size 1.2 m

18 W - Actual Size 0.6 m

For mounting on diameter 42 mm pole or tubular wall-mounting support, supplied with one X M25 polyamide cable gland — 8 to 18.5 mm diameter.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	10.0	54.2	3 H	4Ah	FEB218BUPNE ①
2	36	Bi-pin	110/254	10.4	54.2	3 H	7Ah	FEB236BUPNE

① 2 x 18 W is supplied with external battery pack (see dimensional data).

Standard and Emergency Battery Back-Up. Increased Safety

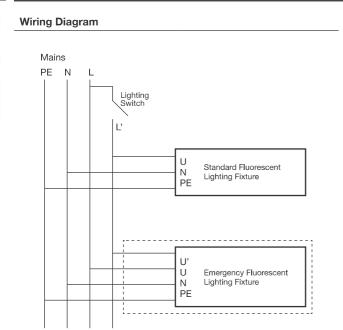
Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

	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
//8 Ring Bolts		
	Set of two	
$(\bigcirc)$	Zinc plated steel	FERBM8Z
Half Clamps Brackets for Pole M	ounting	
	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
Vall Mounting Adaptor		
	For pole mounting version	
	Diameter 42mm	
	Galvanized steel	FEWMG
linged Brackets		
ര	Set of two brackets for adjusting luminaire	
	Aluminium	FEHBA
	316 stainless steel	FEHBS
all Prevention Kit		
	Safety chain retains fixture temporarily to ease installation	
	For M25 cable entry	FESCM25
	For M20 cable entry	FESCM20



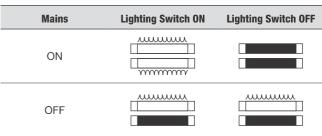
Standard and Emergency Battery Back-Up. Increased Safety

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



### **Emergency Function Diagram**

**Two Lamp Version** 



#### **Three Lamp Version**

Mains	Lighting Switch ON	Lighting Switch OFF
ON		
OFF		

#### **LED Status**

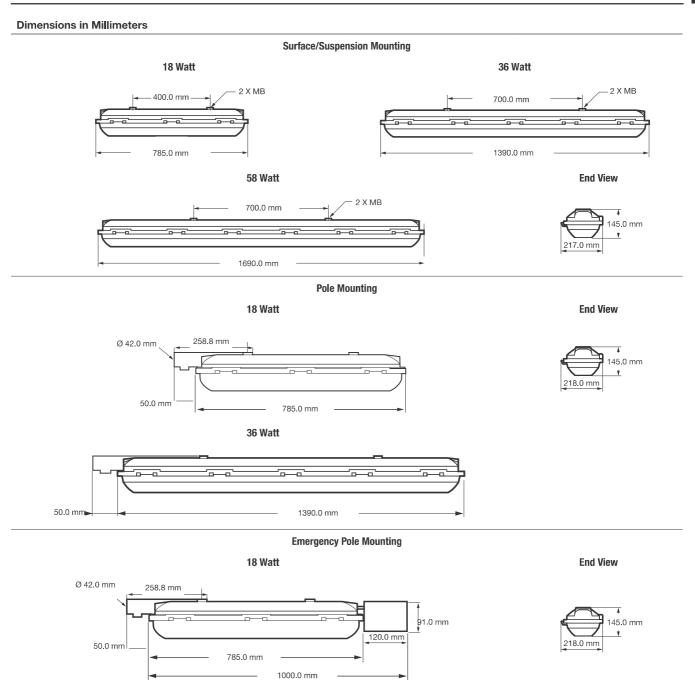
Color	Indication	Function
0	LED Blinking	Mains good – Battery charging
Green	LED Continuous	Mains good – Battery charged
	LED Blinking	No battery connected OR Something is defective
Red	LED Continuous	Mains faulty — Output ON
	LED Flashing	Mains faulty — Battery empty OR Lamp is defective
V-II	LED Blinking	Mains good — Performing self test
Yellow	LED Continuous	Self test was not okay
None (Off)	No Light Emitted	No mains — Battery completely empty

#### **Emergency Light Duration**

Version	Battery Capacity	Duration	Light Output
0 × 10 W	4 Ah – 6 V	90 minute	80%
2 x 18 W	4 Ah – 6 V	3 hour	40%
2 x 36 W	7 Ah – 6 V	90 minute	45%
2 X 30 VV	7 Ah – 6 V	3 hour	25%
0 × 50 W	7 Ah – 6 V	90 minute	30%
2 x 58 W	7 Ah – 6 V	3 hour	15%

Standard and Emergency Battery Back-Up. Increased Safety

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



Standard and Emergency Battery Back-Up. Increased Safety

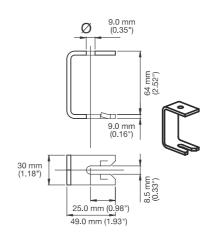
Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

#### **Mounting Data**

FEFBZ: zinc plated steel — Set of two quick fixing brackets for ease of surface mounting

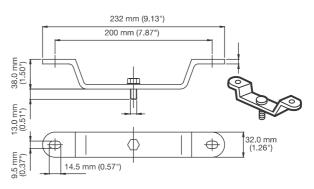






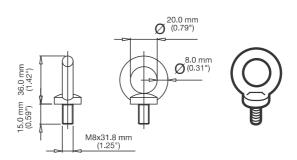
FESBS: 316 stainless steel — Set of two brackets for surface mounting





FERBM8Z: zinc plated steel — Set of two ring bolts





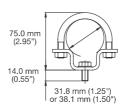
Standard and Emergency Battery Back-Up. Increased Safety

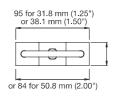
Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

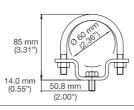
#### **Mounting Data**

FEHC49Z: zinc plated steel or FEHC49S: 316 stainless steel — Set of two clamps for pole diameter 42 mm to 49 mm (for 1-1/4" to 1-1/2" pole). FEHC60Z: zinc plated steel or FEHC60S: 316 stainless steel — Set of two clamps for pole diameter 60 mm (for 2" pole).





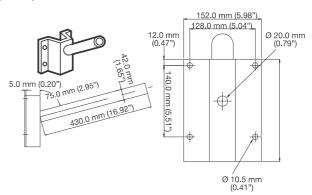






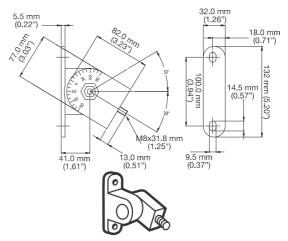
FEWMG: galvanized steel - Wall mounting pole diameter 42 mm (1-1/4")





FEHBA: aluminum or FEHBS: 316 stainless steel - Set of two hinged brackets for adjusting luminaire.





Standard and Emergency Battery Back-Up. Increased Safety

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

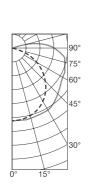
#### **Photometric Data**

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

— — Longitudinal Transverse

TOTAL LUMINAIRE EFFICIENCY = 94.8% NF C 71-121: 0.86 H + 0.09 T CANDELA DISTRIBUTION

CANDLLA DISTRIBUTION				
	0-180	90-270		
0	215	215		
5	214	214		
10	211	215		
15	207	213		
20	200	211		
25	191	209		
30	181	208		
35	169	202		
40	155	196		
45	139	187		
50	122	181		
55	103	175		
60	83	174		
65	62	173		
70	42	165		

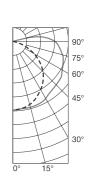


1 x 36 W Efficiency 89.3% NF C 71-121: 0.81 H + 0.08 T CANDEL A DISTRIBUTION

CANDELA DISTRIBUTION				
	0-180	90-270		
0	205	205		
5	204	203		
10	202	203		
15	197	202		
20	191	201		
25	182	201		
30	173	200		
35	161	192		
40	148	183		
45	133	177		
50	117	173		
55	99	168		
60	80	168		
65	61	163		
70	41	154		

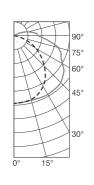
1 x 58 W Efficiency 87.5% NF C 71-121: 0.80 H + 0.07 T CANDELA DISTRIBUTION 0-180 90-270 0 198 198 5 197 197





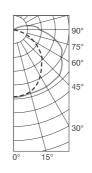
2 x 18 W Efficiency 85.1% NF C 71-121: 0.78 H + 0.08 T

CANDEL	A DISTRIB	UTION
	0-180 9	0-270
0	195	195
5	195	194
10	192	192
15	187	192
20	181	193
25	173	194
30	163	194
35	152	193
40	138	192
45	124	191
50	108	183
55	91	176
60	73	163
65	55	150
70	37	145



2 x 36 W Efficiency 80.5% NF C 71-121: 0.73 H + 0.07 T

CANDEL	A DISTRIBI	JTION
	0-180 90	-270
0	185	185
5	185	184
10	182	182
15	178	181
20	172	183
25	164	183
30	154	183
35	143	183
40	131	183
45	117	179
50	102	173
55	85	166
60	68	155
65	51	145
70	35	141



90°

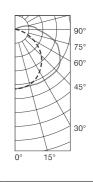
60°

45°

309

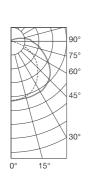
2 x 58 W Efficiency 76.9% NF C 71-121: 0.70 H + 0.07 T

CANDEL	A DISTRIB	UTION
	0-180 90	)-270
0	173	173
5	172	173
10	170	171
15	166	169
20	161	172
25	154	172
30	145	172
35	135	171
40	123	172
45	111	170
50	97	165
55	82	157
60	66	148
65	50	139
70	34	133



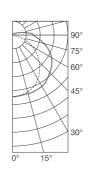
Efficiency 68.1% NF C 71-121: 0.63 G + 0.05 T

CANDELA DISTRIBUTION				
	0-180	90-270		
0	173	173		
5	172	172		
10	169	170		
15	135	169		
20	160	169		
25	153	168		
30	144	167		
35	135	162		
40	123	158		
45	110	153		
50	96	146		
55	82	136		
60	66	123		
65	50	111		
70	34	100		



Efficiency 68.1% NF C 71-121: 0.63 G + 0.07 T

	12110100	u , 0101
CANDEL	A DISTRIB	UTION
	0-180 90	<b>)–27</b> 0
0	174	174
5	174	174
10	171	173
15	167	171
20	162	171
25	155	170
30	146	168
35	136	163
40	125	159
45	112	153
50	98	145
55	83	135
60	67	123
65	51	110
70	35	100



Efficiency 65.6% NF C 71-121: 0.61 H + 0.04 T

CANDELA DISTRIBUTION				
	0-180 90	-270		
0	170	170		
5	170	170		
10	167	168		
15	163	169		
20	158	167		
25	151	167		
30	143	163		
35	133	159		
40	122	155		
45	109	149		
50	95	140		
55	81	129		
60	65	116		
65	49	105		
70	33	96		

