

A.T.X.[®] FN Series Heavy Duty Nonmetallic Fluorescent Luminaires

Standard and Emergency Back-Up. Zone 2 - 21 and 22

ATEX/IEC:
Zone 2 - 21 and 22
Ⓜ II 3 GD and Ⓜ II 2 D
IP66/67 - IK10

NBR IEC — 18 W, 36 W, 58 W:
Zone 2 - 21 and 22
Ex nR IIC Gc
Ex tb IIIC Db
IP66/67

Applications

- Can be installed in hazardous areas designated as Zone 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.

Features

- Corrosion-resistant fiberglass reinforced polyester body and hinged polycarbonate lens.
- High impact resistance housing (20 Joules - IK10) from (-40 °C to +55 °C (-40 °F to +131 °F) 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 screw driver.
- Central opening with unique patented release system to prevent damage.
- Hinged parabolic reflector for high lumen output efficiency.
- Vibration resistant spring loaded lampholders for Bi-pin (G13) or mono-pin (Fa6) ① versions.
- 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.
- Also available with electronic ballast 220/240 Vac/Vdc +/- 10% 50/60 Hz. High power factor electronic ballast (>0.95). EOL.
- Available in 3 hours emergency version, including multi-tap ballast with built-in monthly self test. Test results through multi-color LED display.

Standard Material

- Housing: fiberglass reinforced polyester (FRP)
- Lens: polycarbonate
- Internal reflector: highly reflective white polycarbonate
- 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: FLn
 - Gas: Zone 2
 - Conforming to ATEX 94/9/CE: CE Ⓜ II 3 G
 - ATEX/IEC Protection: Ex nR II or Ex nA II
 - T Rating: T6 to T4



2 x 58 W



2 x 36 W



2 x 18 W

- Dust: Zones 21 and 22
 - Conforming to ATEX 94/9/CE: CE Ⓜ II 2 D, CE Ⓜ II 3 D
 - ATEX/IEC Protection: Ex tD A21
 - Surface Temperature: T75 °C (T167 °F)
- Ambient Temperature: -40 °C to +55 °C (-40 °F to +131 °F)
- CE Declaration of Conformity: 50212/50225
- ATEX Certificate: LCIE 03 ATEX 6072/6166
- IECEx Certificate: IECEx LCI 04.0021
- Other Certifications: GOST, Marine Listed UL 1598A
- Index of Protection (solid and liquid): IP66/67
- Impact Resistance (shock): IK10
- 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); 62262 (IK)

NBR IEC Brazilian Certifications and Compliances ②

- Certification Type: FLn
 - Gas: Zone 2
 - IEC Marking: Ex nR IIC Gc
 - T Rating T4
 - Dust: Zones 21 and 22
 - IEC Marking: Ex tb IIIC Db
 - Surface temperature: +135 °C (+275 °F)
- Ambient Temperature: -20 °C to +55 °C (-4 °F to +131 °F)
- INMETRO Ordinance: 179
- INMETRO Certificate: BVC 11.0815
- Ingress Protection (solid and liquid): IP66/67
- Impact Resistance (shock): IK10
- Ex Standards: ABNT NBR IEC 60079-0, 60079-15, 60079-31
- Other Standards: ABNT NBR IEC 60529 (IP)

① Mono-pin (Fa6) is NOT certified for use in NBR IEC governed locations.

② 55 W, 80 W and compact lamps are NOT certified for use in NBR IEC governed locations.

A.T.X.[®] FN Series Heavy Duty Nonmetallic Fluorescent Luminaires

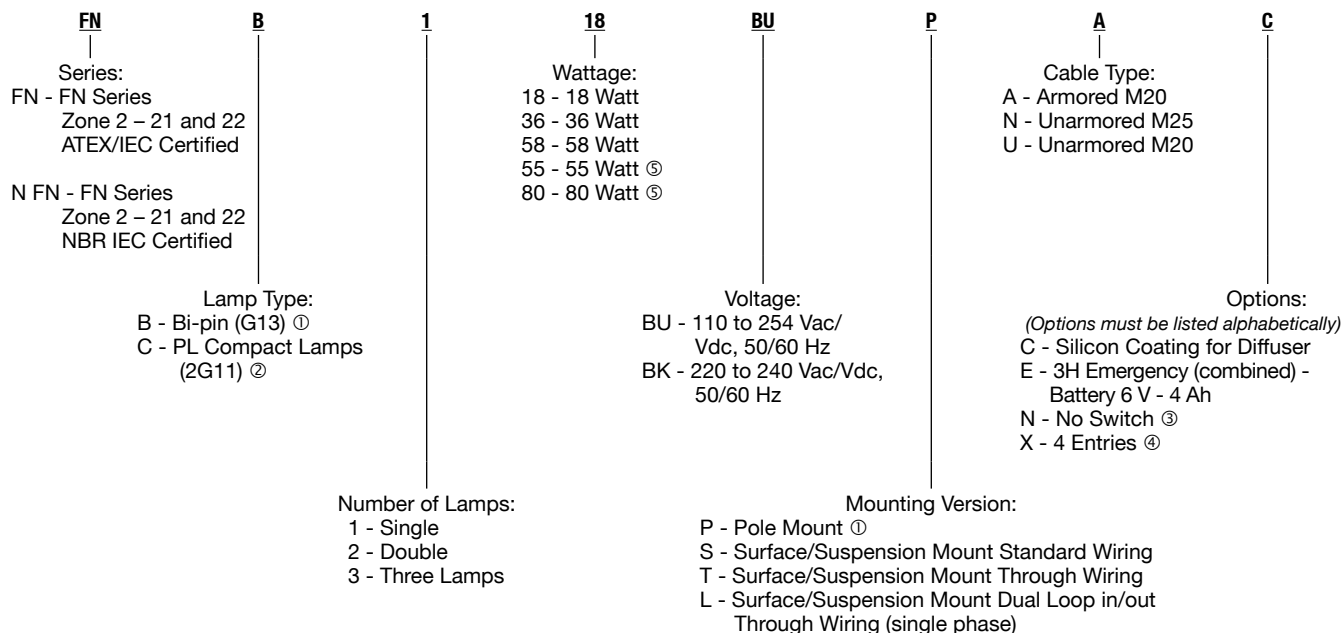
Standard and Emergency Back-Up. Zone 2 - 21 and 22

ATEX/IEC:
 Zone 2 - 21 and 22
 Ⓢ II 3 GD and Ⓢ II 2 D
 IP66/67 - IK10

NBR IEC — 18 W, 36 W, 58 W:
 Zone 2 - 21 and 22
 Ex nR IIC Gc
 Ex tb IIIC Db
 IP66/67

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

Catalog Numbering Guide — FN Non-Metallic Fluorescent Lighting Fixtures



① Mono-pin (Fa6) is NOT certified for use in NBR IEC governed locations.
 ② PL compact lamps are only available in the 55 W and 80 W standard versions. These are not certified for use in NBR IEC governed locations.
 ③ Only for standard versions.
 ④ Only for S, T and L mounting versions.
 ⑤ 55 and 80 Watt PL compact lamp fixtures are not certified for use in NBR IEC governed locations.
 ⑥ Only 2 x 18 W and 2 x 36 W with M25 entry versions.

A.T.X.[®] FN Series Heavy Duty Nonmetallic Fluorescent Luminaires

Standard and Emergency Back-Up. Zone 2 - 21 and 22

ATEX/IEC:
Zone 2 - 21 and 22
Ⓢ II 3 GD and Ⓢ II 2 D
IP66/67 - IK10

NBR IEC — 18 W, 36 W, 58 W:
Zone 2 - 21 and 22
Ex nR IIC Gc
Ex tb IIC Db
IP66/67

Standard Version

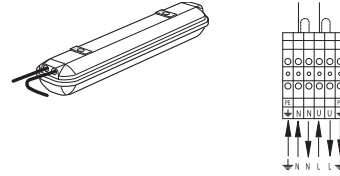
Surface/Suspension Mounting and Standard Wiring Version

Connection via 1 x 6 terminals.

Capacity (flexible/solid): 4 mm²/6 mm² (0.006 in²/0.009 in²).

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 (0.31 to 0.73") diameter — and two M25 polyamide blanking plugs.



Number of Lamps	Wattage (W)	Lamp Type	Voltage (V)	Weight kg (lbs)	Volume dm ³ (in ³)	Catalog Number ①②③④	
						ATEX/IEC	NBR IEC
2	18	G13	220/240	5.5 (12.13)	32.3 (1971.07)	FNB218BKSNN	NFNB218BKSNN
2	18	G13	110/254	5.5 (12.13)	32.3 (1971.07)	FNB218BUSNN	NFNB218BUSNN
2	36	G13	220/240	7.9 (17.42)	54.2 (3307.49)	FNB236BKSNN	NFNB236BKSNN
2	36	G13	110/254	7.9 (17.42)	54.2 (3307.49)	FNB236BUSNN	NFNB236BUSNN
2	58	G13	220/240	19.84/9.0	3966.54/65.0	FNB258BKSNN	NFNB258BKSNN
2	58	G13	110/254	11.0 (24.25)	3966.54/65.0	FNB258BUSNN	NFNB258BUSNN

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	Wattage (W)	Lamp Type	Voltage (V)	Weight kg (lbs)	Volume dm ³ (in ³)	Catalog Number ①②③④	
						ATEX/IEC	NBR IEC
2	18	G13	220/240	5.5 (12.13)	32.3 (1971.07)	FNB218BKSAN	NFNB218BKSAN
2	18	G13	110/254	5.5 (12.13)	32.3 (1971.07)	FNB218BUSAN	NFNB218BUSAN
2	36	G13	220/240	7.9 (17.42)	54.2 (3307.49)	FNB236BKSAN	NFNB236BKSAN
2	36	G13	110/254	7.9 (17.42)	54.2 (3307.49)	FNB236BUSAN	NFNB236BUSAN
2	58	G13	220/240	19.84/9.0	3966.54/65.0	FNB258BKSAN	NFNB258BKSAN
2	58	G13	110/254	11.0 (24.25)	3966.54/65.0	FNB258BUSAN	NFNB258BUSAN

- ① For silicon coating for diffuser, add suffix **-C** at the end of the catalog number.
- ② For 3H emergency (combined) - battery V - 4 Ah, add suffix **-E** at the end of the catalog number.
- ③ For no switch, add suffix **-N** at the end of the catalog number.
- ④ For 4 entries, add suffix **-X** at the end of the catalog number.

A.T.X.[®] FN Series Heavy Duty Nonmetallic Fluorescent Luminaires

Standard and Emergency Back-Up. Zone 2 - 21 and 22

ATEX/IEC:
 Zone 2 - 21 and 22
 II 3 GD and II 2 D
 IP66/67 - IK10

NBR IEC — 18 W, 36 W, 58 W:
 Zone 2 - 21 and 22
 Ex nR IIC Gc
 Ex tb IIC Db
 IP66/67

Emergency Version

Surface/Suspension Mounting and Standard Wiring

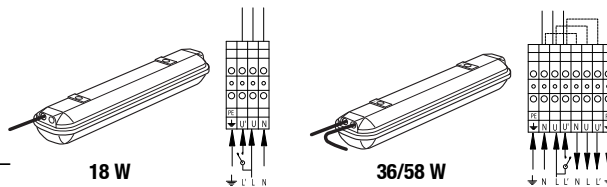
Connection via 1 x 4 terminals for 18 W version.

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

Capacity (flexible/solid): 4 mm²/6 mm² (0.006 in²/0.009 in²).

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 (0.31 to 0.73") diameter — and two M25 polyamide blanking plugs.



Number of Lamps	Wattage (W)	Lamp Type	Voltage (V)	Weight kg (lbs)	Volume dm ³ (in ³)	Duration (Hours)	Battery Capacity	Catalog Number ①②③④	
								ATEX/IEC	NBR IEC
2	18	G13	110/254	7.3 (16.09)	32.3 (1971.07)	3 H	4 Ah	FNB218BUSNEN	NFN218BUSNEN
2	36	G13	110/254	9.6 (21.16)	54.2 (3307.49)	3 H	4 Ah	FNB236BUSNEN	NFN236BUSNEN
2	58	G13	110/254	10.7 (23.59)	3966.54/65.0	3 H	4 Ah	FNB258BUSNEN	NFN258BUSNEN

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.


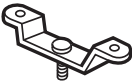


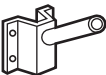

Number of Lamps	Wattage (W)	Lamp Type	Voltage (V)	Weight kg (lbs)	Volume dm ³ (in ³)	Duration (Hours)	Battery Capacity	Catalog Number ①②③④	
								ATEX/IEC	NBR IEC
2	18	G13	110/254	7.3 (16.09)	32.3 (1971.07)	3 H	4 Ah	FNB218BUSAEN	NFN218BUSAEN
2	36	G13	110/254	9.6 (21.16)	54.2 (3307.49)	3 H	4 Ah	FNB236BUSAEN	NFN236BUSAEN
2	58	G13	110/254	10.7 (23.59)	3966.54/65.0	3 H	4 Ah	FNB258BUSAEN	NFN258BUSAEN

- ① For silicon coating for diffuser, add suffix **-C** at the end of the catalog number.
- ② For 3H emergency (combined) - battery V - 4 Ah, add suffix **-E** at the end of the catalog number.
- ③ For no switch, add suffix **-N** at the end of the catalog number.
- ④ For 4 entries, add suffix **-X** at the end of the catalog number.

A.T.X.[®] FN Series Heavy Duty Nonmetallic Fluorescent Luminaires

Standard and Emergency Back-Up. Zone 2 - 21 and 22

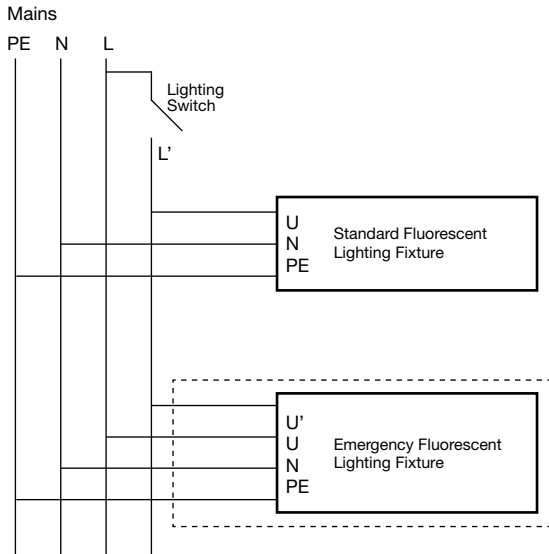
Accessories

	Description	Catalog Number	
		ATEX/IEC	NBR IEC
Fixing Brackets			
	Set of two brackets for surface installation		
	Zinc plated steel	FEFBZ	NFEFBZ
	316 stainless steel	FEFBS	NFEFBS
Brackets for Surface Mounting			
	Set of two		
	Aluminium (gray painted)	FESBA	NFESBA
	316 stainless steel	FESBS	NFESBS
M8 Ring Bolts			
	Set of two		
	Zinc plated steel	FERBM8Z	NFERBM8Z
Half Clamps Brackets for Pole Mounting			
	Set of two		
	Diameter for 1-1/4 to 1-1/2" pole: 42 mm (16.65 in) to 49 mm (1.93 in)		
	Zinc plated steel	FEHC49Z	NFEHC49Z
	316 stainless steel	FEHC49S	NFEHC49S
	Diameter for 2" pole: 60 mm (2.36 in)		
	Zinc plated steel	FEHC60Z	NFEHC60Z
	316 stainless steel	FEHC60S	NFEHC60S
Wall Mounting Adaptor			
	For pole mounting version — Diameter 42 mm (1.65")		
	Galvanized steel	FEWMG	NFEWMG
Hinged Brackets			
	Set of two brackets for adjusting luminaire		
	Aluminium	FEHBA	NFEHBA
	316 stainless steel	FEHBS	NFEHBS

A.T.X.[®] FN Series Heavy Duty Nonmetallic Fluorescent Luminaires

Standard and Emergency Back-Up. Zone 2 - 21 and 22

Wiring Diagram



Emergency Function Diagram

Two Lamp Version

Mains	Lighting Switch ON	Lighting Switch OFF
ON		
OFF		

Three Lamp Version

Mains	Lighting Switch ON	Lighting Switch OFF
ON		
OFF		

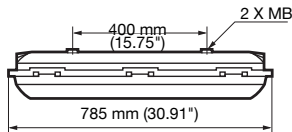
LED Status

Color	Indication	Function
Green	LED glows	Batteries are connected
	LED blinks	Batteries are charged
Red	LED blinks	Batteries are not connected or defect
Yellow	LED blinks	Batteries are charging and discharging during automatic cycle

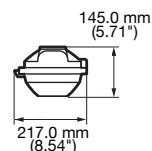
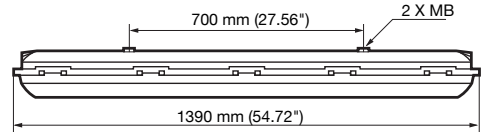
Dimensions in Millimeters (Inches)

Surface/Suspension Mounting

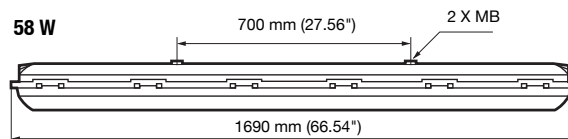
18 W



36 W



58 W



A.T.X.[®] FN Series Heavy Duty Nonmetallic Fluorescent Luminaires

Standard and Emergency Back-Up. Zone 2 - 21 and 22

Photometric Data

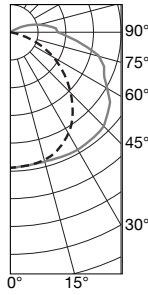
Polar curves for a 1000 lm flux, according to NF C 71-120
Luminaire symbol according to NF C 71-121

--- Longitudinal
— Transverse

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

CANDELA DISTRIBUTION

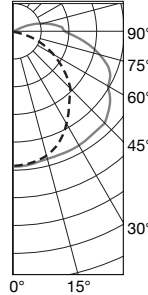
	0-180	90-270
0	195	195
5	195	194
10	192	192
15	187	192
20	181	193
25	173	194
30	163	194
35	152	193
40	138	192
45	124	191
50	108	182
55	91	176
60	73	163
65	55	150
70	37	145



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

CANDELA DISTRIBUTION

	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



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

CANDELA DISTRIBUTION

	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

