

Lighting: Fluorescent Lighting

FN Series: Heavy Duty Nonmetallic Fluorescent Lighting Fixtures Standard and Emergency Back-Up – Zone 2 - 21 & 22



2 x 58 W



2 x 36 W



2 x 18 W

Compliance Data:

ATEX – IEC:



Zone 2 – 21 & 22	ATEX	II 2 D and II 3 GD	IEC	CE
Ex nR II or Ex nA II	T6 to T4	Ex tD A21	T75°C	IP66/67 -IK10

Power and Voltage:

18 W / 36 W / 58 W	110 to 254 Vac/Vdc +/- 10% 50/60 Hz	Lamp Type
1, 2, 3 Lamp Versions		Fluorescent T8 (G13) and PL Compact (2G11)

Operating Temperatures:

-40°C to +55°C

Lighting: Fluorescent Lighting

FN Series: Heavy Duty Nonmetallic Fluorescent Lighting Fixtures Standard and Emergency Back-Up – Zone 2 - 21 & 22

Zone 2 - 21 & 22

⊗ II 3 GD and ⊗ II 2 D

ATEX / IECEx

IP66/67 - IK10

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 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) 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.

Standard Material of Fixtures:

- Fiberglass reinforced polyester housing.
- Polycarbonate lens.
- Elastomer gasket.
- Highly reflective white polycarbonate internal reflector.

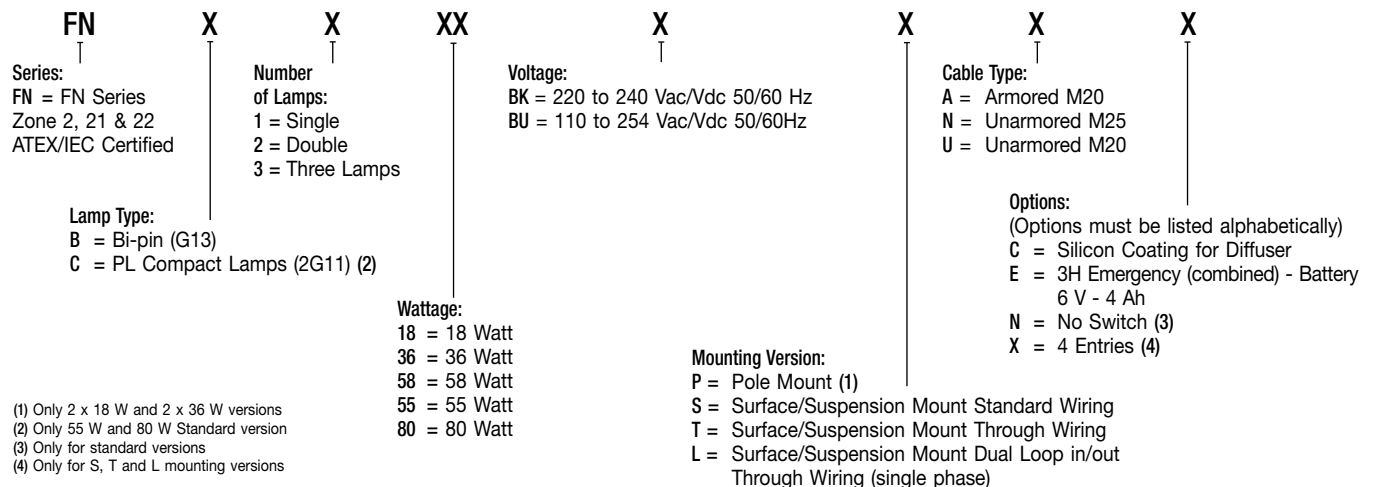
Standard Material of Mounting Accessories:

- Mounting accessories available in different materials such as gray painted aluminum, zinc plated steel, galvanized steel or 316 stainless steel.

Options:

- Silicone coating for added protection in H₂S hydrogen sulfide environments.
- Without safety switch.
- Level gauge light fitting.
- 316 stainless steel fixing inserts.

Catalog Number Logic:



Lighting: Fluorescent Lighting

FN Series: Heavy Duty Nonmetallic Fluorescent Lighting Fixtures Standard and Emergency Back-Up – Zone 2 - 21 & 22

Zone 2 - 21 & 22

II 3 GD and II 2 D

ATEX / IECEx

IP66/67 - IK10

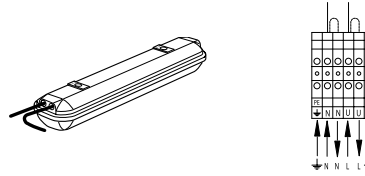
LIGHTING

Ordering Information – Standard Version:

Surface/Suspension Mounting and Standard Wiring Version:

Connection via 1 x 6 terminals.

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



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 (dia. 8 to 18.5 mm) and two M25 polyamide blanking plugs.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
2	18	G13	220/240	5.5	32.3	FNB218BKSN	096336
2	18	G13	110/254	5.5	32.3	FNB218BUSN	091336
2	36	G13	220/240	7.9	54.2	FNB236BKSN	096337
2	36	G13	110/254	7.9	54.2	FNB236BUSN	091337
2	58	G13	220/240	9	65	FNB258BKSN	096339
2	58	G13	110/254	11	65	FNB258BUSN	091339

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 (dm ³)	Catalog Number	Old Catalog Number
2	18	G13	220/240	5.5	32.3	FNB218BKSAN	096346
2	18	G13	110/254	5.5	32.3	FNB218BUSAN	091346
2	36	G13	220/240	7.9	54.2	FNB236BKSAN	096347
2	36	G13	110/254	7.9	54.2	FNB236BUSAN	091347
2	58	G13	220/240	9	65	FNB258BKSAN	096349
2	58	G13	110/254	11	65	FNB258BUSAN	091349

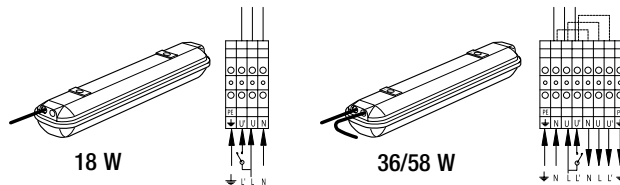
Ordering Information – Emergency Version:

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 & 58 W versions.

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 (dia. 8 to 18.5 mm) and two M25 polyamide blanking plugs.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight (kg)	Volume (dm ³)	Duration (Hours)	Battery Capacity	Catalog Number	Old Catalog Number
2	18	G13	110/254	7.3	32.3	3 H	4 Ah	FNB218BUSNEN	096327
2	36	G13	110/254	9.6	54.2	3 H	4 Ah	FNB236BUSNEN	096328
2	58	G13	110/254	10.7	65	3 H	4 Ah	FNB258BUSNEN	096329

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 (dm ³)	Duration (Hours)	Battery Capacity	Catalog Number	Old Catalog Number
2	18	G13	110/254	7.3	32.3	3 H	4 Ah	FNB218BUSAEN	096356
2	36	G13	110/254	9.6	54.2	3 H	4 Ah	FNB236BUSAEN	096357
2	58	G13	110/254	10.7	65	3 H	4 Ah	FNB258BUSAEN	096358

Lighting: Fluorescent Lighting

FN Series: Heavy Duty Nonmetallic Fluorescent Lighting Fixtures Standard and Emergency Back-Up – Zone 2 - 21 & 22







Zone 2 - 21 & 22

⊕ II 3 GD and ⊕ II 2 D

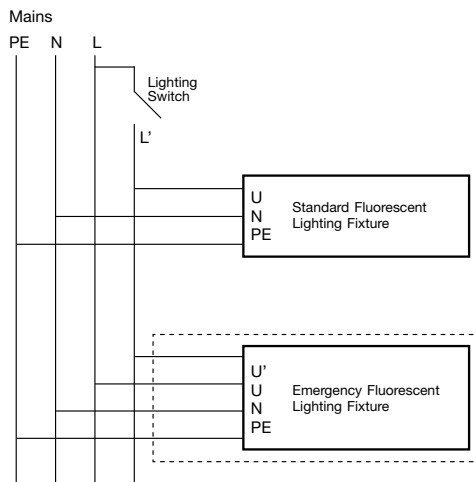
ATEX / IECEx

IP66/67 - IK10

Ordering Information – Accessories:

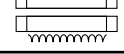

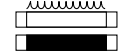
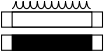
	Description	Catalog Number	Old Catalog Number	Pack
	Fixing Brackets Set of two brackets for ease of surface installation			
	Zinc plated steel	FEFBZ	096596	1
	316 stainless steel	FEFBS	096589	1
	Brackets for Surface Mounting Set of two			
	Aluminum (gray painted)	FESBA	096597	1
	316 stainless steel	FESBS	096590	1
	M8 Ring Bolts Set of two			
	Zinc plated steel	FERBM8Z	096594	1
	Half Clamps Brackets for Pole Mounting Set of two			
	dia. 42 to 49 mm pole (1-1/4" to 1-1/2" tube)			
	Zinc plated steel	FEHC49Z	096593	1
	60 mm OD (2" tube)	FEHC49S	096793	1
	dia. 60 mm pole (2" tube) 42 to 49 mm			
	Zinc plated steel	FEHC60Z	096591	1
	316 stainless steel	FEHC60S	096791	1
	Wall Mounting Adapter For pole mounting version (dia. 42 mm)			
	Galvanized steel	FEWMG	096595	1
	Hinged Brackets Set of two brackets for adjusting luminaire			
	Aluminum	FEHBA	096598	1
	316 stainless steel	FEHBS	096574	1

Wiring Diagram:



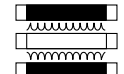
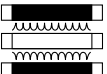


Emergency Function Diagram:

Two Lamp Version

Mains	Lighting Switch ON	Lighting Switch OFF
ON		
OFF		

Three Lamp Version

Mains	Lighting Switch ON	Lighting Switch OFF
ON		
OFF		

Lighting: Fluorescent Lighting

FN Series: Heavy Duty Nonmetallic Fluorescent Lighting Fixtures Standard and Emergency Back-Up – Zone 2 - 21 & 22

Zone 2 - 21 & 22

⊕ II 3 GD & ⊕ II 2 D

ATEX / IECEx

IP66/67 - IK10

LIGHTING

LED status:

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

Compliances:

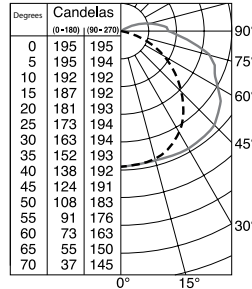
Hazardous Area	Gas	Dust
Certified Type	FLd	
Zones	2	21 & 22
Conforming to ATEX 94/9/CE	CE ⊕ II 3 G	CE ⊕ II 2 D CE ⊕ II 3 D
Symbol of Protection ATEX	Ex nR II or Ex nA II	Ex tD A21
Symbol of Protection IEC		
T Rating	T6 to T4	N.A.
Surface Temperature	N.A.	T75°C
Ambient Temperature	-40°C ≤ Ta ≤ +55°C	
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	IP66/67	
Impact Resistance (shock)	IK10	

Standards:

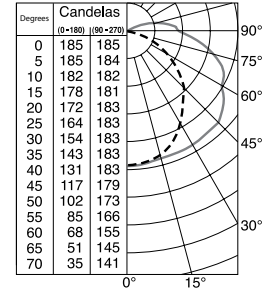
Ex standards	EN / IEC 60079-15; 61241-0; 61241-1
Product standards	EN / IEC 60598-1; 60598-2-22
EMC standards	EN / IEC 55015; 61547
Other standards	EN / IEC 60529 (IP); 62262 (IK)

Photometric Data:

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



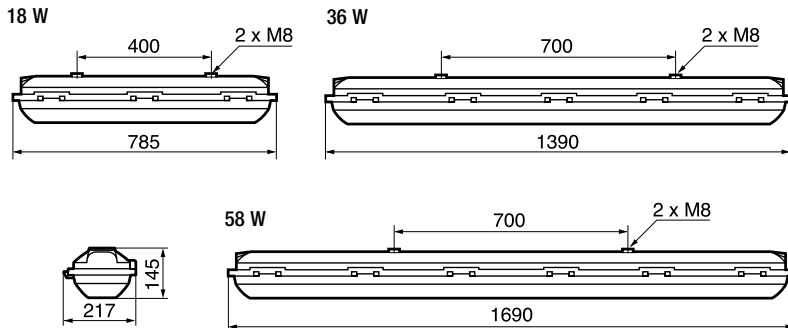
2 x 36 W
Efficiency 80.5%
NF C 71-121: 0.73 H + 0.07 T



Dimensions (mm):

Fluorescent Lighting Fixtures:

Surface/Suspension Mounting



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

