

# FourStar ★★★★★ Lighting



## FS - UV - DUCT - FL - NX disinfection system for HVAC

Applied inside ducts, or in the final section of AHU (Air Handling Unit) UV-DUCT-FL-NX creates a UVGI barrier that inhibits the proliferation of dangerous viruses, bacteria, molds, and spores settling inside Air Conditioning Systems.

UV-DUCT-FL-NX purifies homogeneously the airflow running through its powerful lamps, eliminating the microbial load and the spreading and distribution of hazardous and annoying pathogens inside buildings.

In AC systems, an unpleasant biofilm usually covers all inner surfaces as the result of microorganisms combination and favorable conditions for their proliferation, such as temperature changes, high humidity, and darkness. UV- DUCT-FL inhibits the creation of this biofilm, increasing Indoor Air Quality and comfort. More specifically, the use of UV-DUCT-FL-NX eliminates important issues related to AC Systems and deadly illnesses (such as Legionella Pneumophila, Tuberculosis, Flu, etc.) but also “Sick Building Syndrome,” “Monday Fever,” Asthma, and Allergies. UV- DUCT-FL-NX also allows the control of Hygiene high standards in food industry and fights against Healthcare Associated Infections (HAI) in hospitals.

UV-DUCT-FL-NX application is important not only for IAQ and health but a cleaner AC system is also more efficient from an economic point of view, with less operative and maintenance costs. As a matter of fact, using UVGI, the need of filters replacement and clean of inner surfaces is less necessary than usual.

With UV-DUCT-FL-NX you obtain deep and continuous disinfection and cleaning of your AC system without the use of expensive and polluting chemicals. With UV-DUCT-FL-NX, you have a comfortable and more efficient building.

### WHAT ARE UV-C RAYS?

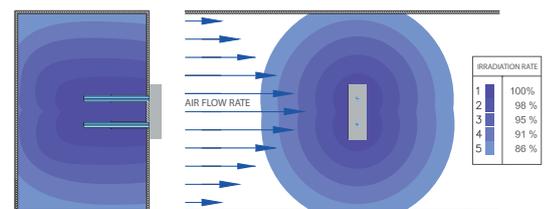
Light in a broad sense can be divided in visible, infra-red and ultraviolet rays.

Ultra-violet rays (invisible) can be classified in:

- UV - A (with tanning properties)
- UV - B (with therapeutic properties)
- UV - C (with germicidal properties)

The germicidal effects of the UV-C radiation destroy DNA of Bacteria, Viruses, Spores, Fungi, Molds and Mites, avoiding their growth and proliferation.

UVGI technology is a physic disinfection method with a great cost/benefit ratio. It's ecological, and, unlike chemicals, it works against every microorganism without creating any resistance.

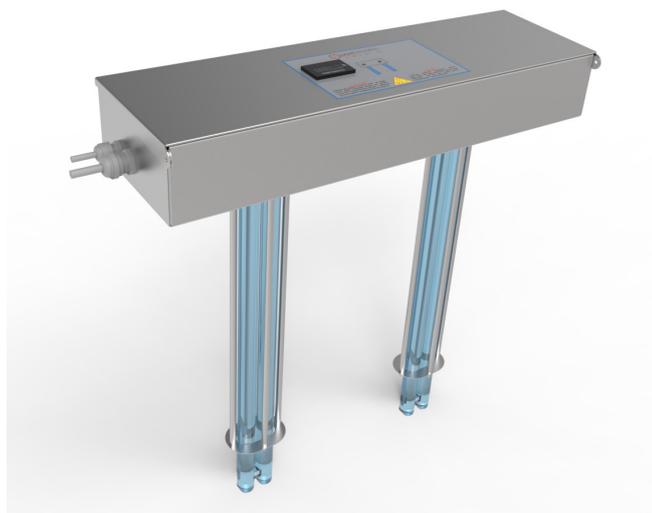


Application in a duct



#### TECHNICAL FEATURES

- Selective UV-C Light Progress lamps (emission peak at 253.7 nm.) high efficiency, ozone free, pure quartz.
- Body in STAINLESS STEEL AISI 304
- All materials are tested for resistance to intense UV-C rays.
- Powered by electronic ballasts specific for Light Progress UV-C rays lamps.
- Powered by 110 or 240V
- Hour Counter and LED Alarms (optional).
- CE mark (LVD - EMC - MD - RoHS).



## FS-UV-DUCT-FL-NX

simple, small and also retrofit



UV-DUCT-FL-NX family includes a range of flange modules with two “U” lamps of different sizes (from 20 to 50 cm) and power ratings (from 70 to 190 W) protected by a stainless steel grid.

Main features of UV-DUCT-FL-NX are the super compact sizes and the on-board commands, which allow easy application even in existing air conditioning systems (retrofit).

Its installation requires just a few simple steps: insert the lamps within the air duct through two holes using the drilling template provided, and screw UV-DUCT-FL-NX flange on the external channel wall, turn in ON and it's done!

Ballasts are inserted directly inside the case, and they are specific for Light Progress UV-C lamps, optimizing their performances and durability.

UV-DUCT-FL-NX is made with high quality and extremely durable components and works perfectly in difficult operating conditions (high humidity, low temperature, etc.).



*Application in A.H.U.*

# FS-UV-DUCT-FL-NX

One Universal Unit Three  
Lamp Options

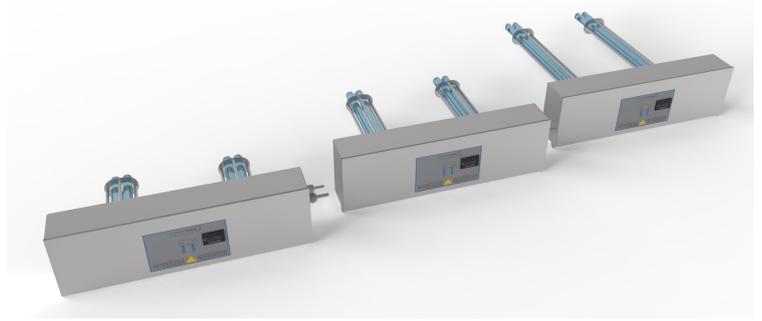
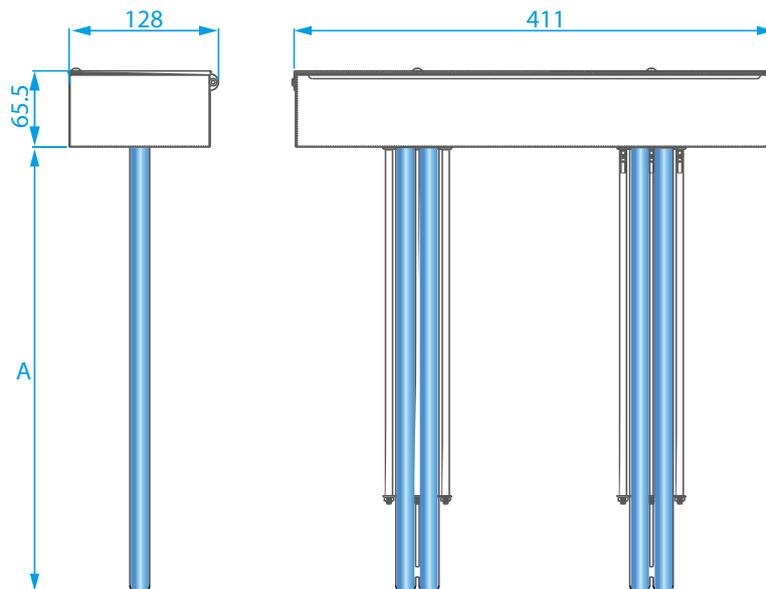


TABLE -

| FS-UV-DUCT-FL-NX             | 2/35HP           | 2/60HP             | 2/95HP              |
|------------------------------|------------------|--------------------|---------------------|
| LAMP LIFETIME UP TO (hours)* | ≤ 18,000         | ≤ 18,000           | ≤ 18,000            |
| CONSUMPTION (W)              | 70               | 120                | 190                 |
| DIMENSIONS lxsxh (inches)    | 16.25 x 5.1 x 10 | 16.25 x 5.1 x 17.8 | 16.25 x 5.1 x 22.75 |
| “A” LENGTH (inches)          | 7.25             | 15                 | 20                  |
| WEIGHT (lbs)                 | 5.3              | 5.7                | 5.9                 |
| AIR FLOW (CFM)               | 470 - 1,180      | 755 - 2,000        | 1,300 - 3,300       |
| PROTECTION RATING            | IP 20            |                    |                     |
| REPLACEMENT LAMP             | N°2 GHP-35WH     | N°2 GHP-60WH       | N°2 GHP-95WH        |

\* continuous operation

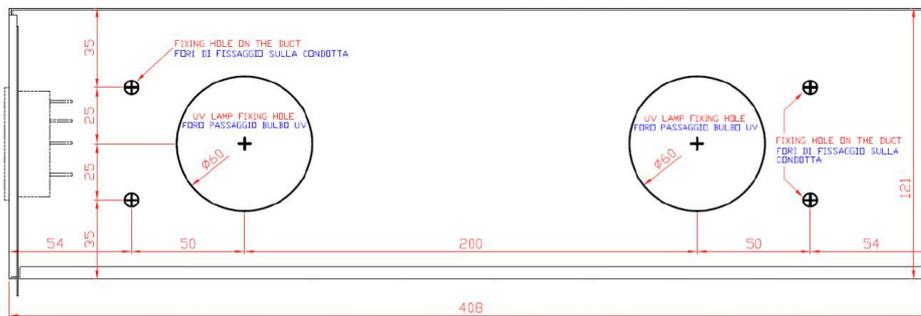
## TECHNICAL DRAWINGS -



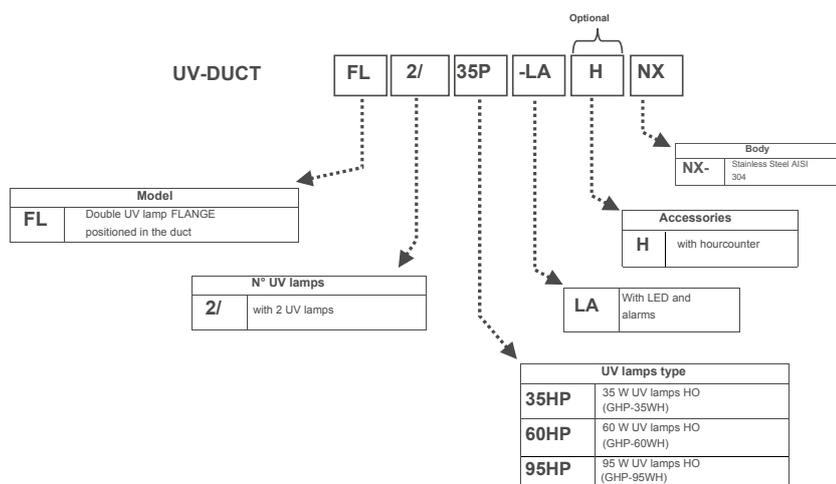
# INSTALLATION -

Installation is very easy, you just need to make two holes with a hole saw on the duct you want to treat and insert the device within the holes. If you need to install more than one device, please try to distribute them along the channel to create a uniform irradiation and avoid shadows. In this way, you can purify the airflow entirely. Our technical department designs custom layouts for clients' specific needs. Installation procedures:

- 1) Place the device/s downstream from the Air Conditioning system.
- 2) Make the two holes on the duct's wall using the drilling template provided.
- 3) Open the case and fix the device on the duct with 4 tapping screws through the holes on the base.



# SKU NOMENCLATURE



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