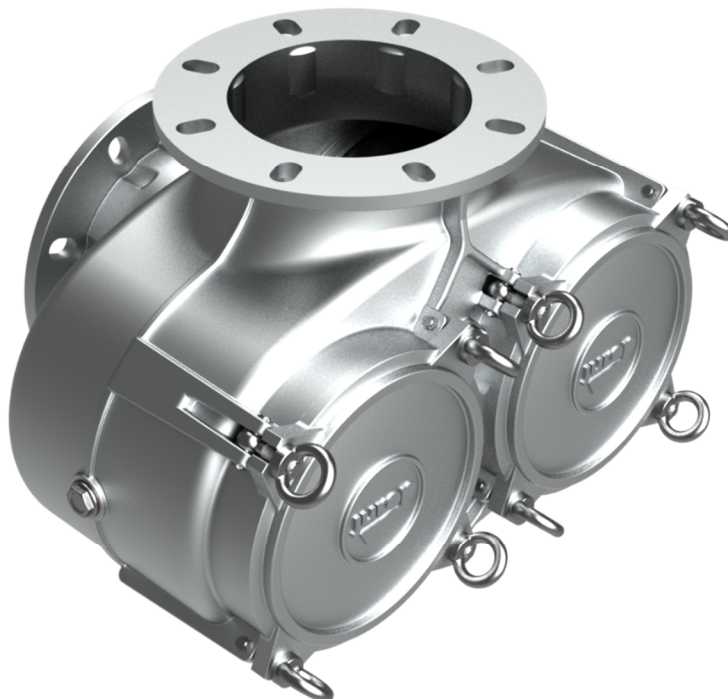


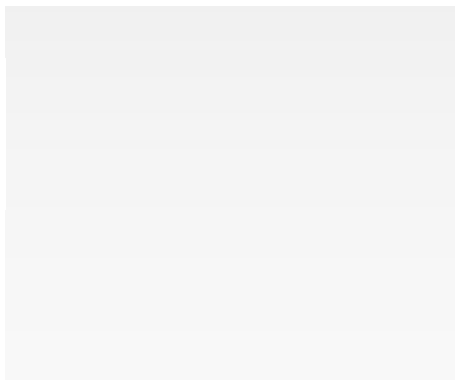
EN

FLAME ARRESTER DRF/F220x4



**ACCESSORIES AND
COMPONENTS**

Air filter and flame arrester



COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

COMPANY WITH
ENVIRONMENTAL SYSTEM
CERTIFIED BY DNV
ISO 14001

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 3834-2

TECHNICAL DATA

The bidirectional explosion-proof flame arrester DRF/F220x4 is a protection system that prevents the propagation of flames (fire) from one element to the other separated by the flame arrester itself. The device connects two lines normally used for suction / pressurization of air and stops an eventual flame created or entered in the line itself.

The devices flame arrester DRF/F220x4 is suitable for fluids up to **Explosion group IIB**.

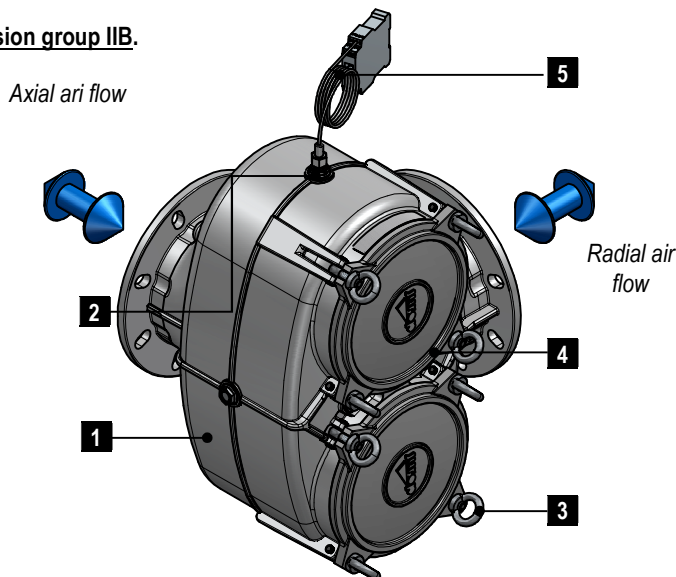
The flame arrester is available in two versions:

- **DRF/F220x4**, cod. 14450 047 E0, with mesh filter cartridge with filtering capacity of 200 µm;

Flame arrester DRF/F220x4 features a Lu/D ratio of 10.33, maximum length L = 2160 mm and diameter Φi = 212 mm.

The filter body, the cover and the filtering cartridge are made of **Stainless steel 304**.

The following figure shows a schematic diagram of a flame arrester, highlighting its main components.



LEGEND

1	Filter-housing	4	Cover
2	Connection port / Port of draining of condensed vapors	5	ATEX certified thermostat (available on demand)
3	Locking eyebolt		

The following table shows the main operating parameters concerning the ratio Lu/D, max air-flow, condition of combustion test, maximum work-pressures, temperature (work-temperature, intervention temperature and thermostat adjusting), number of connection ports and weight.

Operating parameters

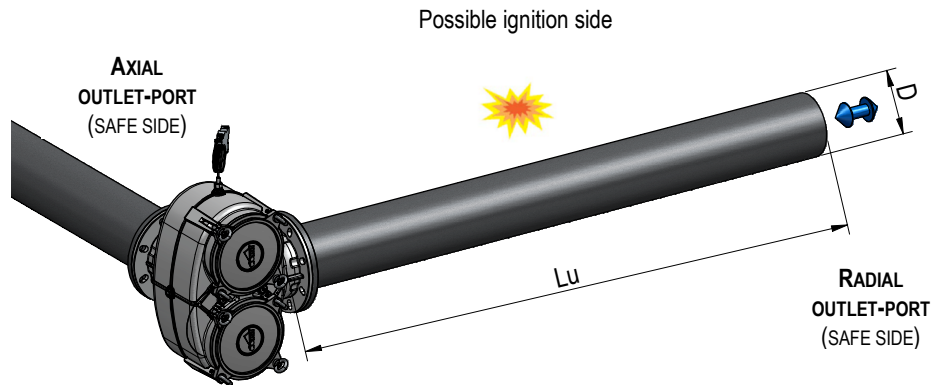
RATIO LU/D	≤ 10,33
MAX AIR FLOW	< 6400 m³/h
COMBUSTION TEST LENGTH 1 MIN. (BURN RATING)	b
COMBUSTION TIME: 1 MIN. (BURNING TIME T=1 MIN.)	max 30 sec.
MAXIMUM WORK-PRESSURE (BAR ABSOLUTE)	1,5 bar (0,15 MPa)
MAXIMUM WORK-TEMPERATURE	150 °C
THERMOSTAT ADJUSTING & INTERVENTION TEMPERATURE	150 °C
MAX ALLOWED ENVIRONMENT TEMPERATURE DURING OPERATION	-20 / +60°C
CONNECTION PORTS (FOR VENTING-LINE, DRAINING OF CONDENSED VAPORS AND TEMPERATURE MONITORING DEVICE)	3 da ¾ “
DEGREE OF FILTRATION	0,200mm (200 µm)
FILTER AREA	2180 cm²
WEIGHT	197 kg



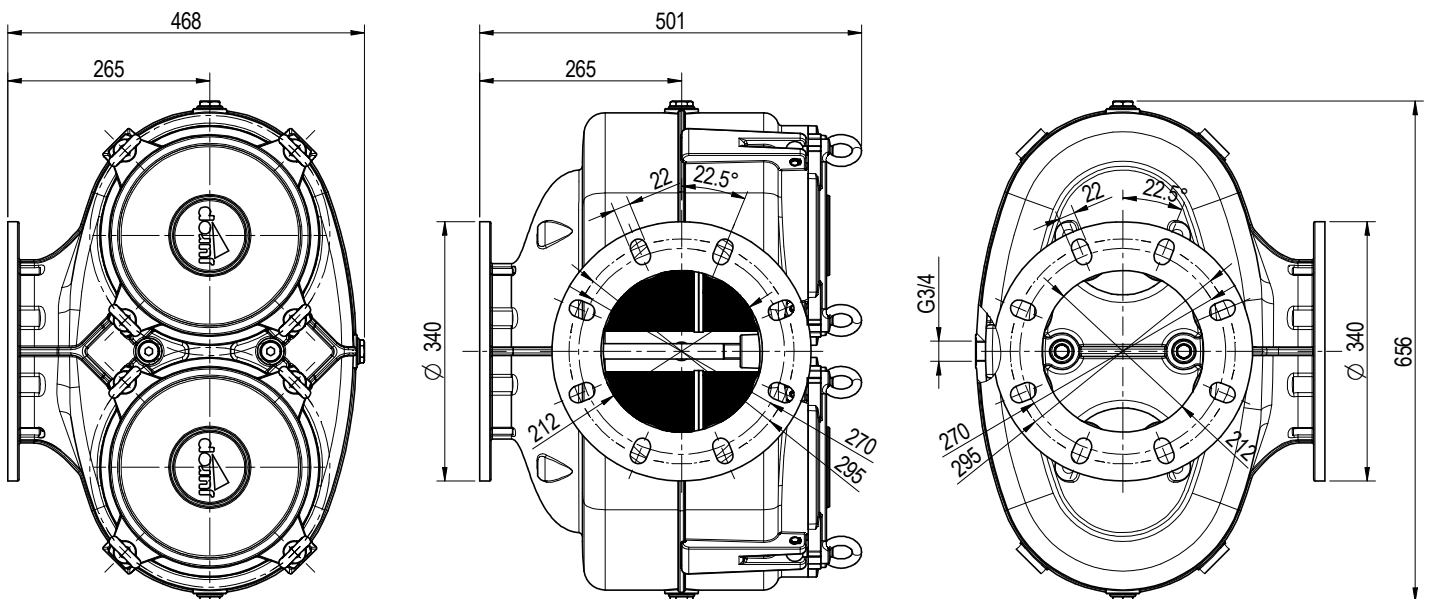
While positioning/mounting the flame arrester pay attention that / to:

- a) The flame arrester is bidirectional. Possible ignition side both at axial and radial outlet-port side;
- b) Mount close to the filtering net, on possible ignition side, an **ATEX certified thermostat** (2 probes in case of use as two-way flame arrester);
- c) In order to prevent possible sparks 'of mechanical origin use suitable cyclone type devices to stop large particles been sucked inside the line;
- d) Fit an effective earthing-line to discharge eventual static-electricity;
- e) Maintain the maximum allowed length of the piping (max distance from the pump) on the potential ignition side;
- f) Branching-out of the piping and valves on the potential spark/flame side have to be fitted as close as possible to the flame arrester;
- g) Depending of the use / working site the filter net may need a daily cleaning. The filter must therefore have an **easy access (it has not to be sealed off)**;
- h) It has to be possible to use one of the ports (dia. 3/4") for draining of eventual liquids. In case there are (fitted) valves, make sure that all elements are perfectly tight;
- i) Use PN6 piping on the potential ignition side.

In the drawing below one of possible state-of-the-art installations (for instance radial ignition).

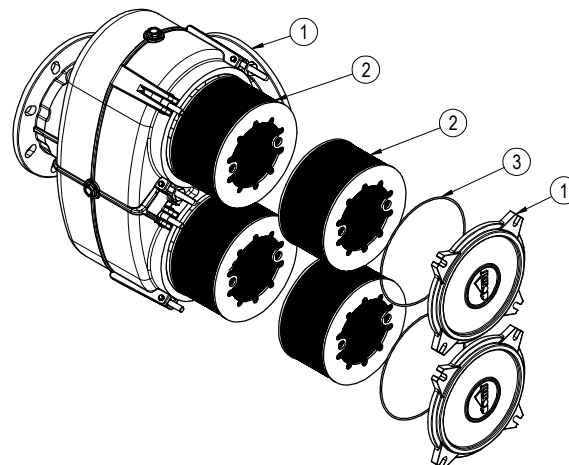


Dimensions of flame arrester DRF/F220x4



MATERIALS

- 1. Filter-housing and lid made in **Stainless steel 304**.
- 2. The cartridge filter metal pack (and the mesh filter cartridge if present) are made of **Stainless steel 304**.
- 3. Inside sealing O-rings are made in **Viton**.



MARKINGS ON THE SPARK ARRESTOR

Name and address of the manufacturer: **Jurop S.p.A. via Crosera n°50, 33082 Azzano Decimo, Pordenone – Italy**

Type or Series designation: **DRF/F220x4**

Manufacturing number: **211001 (example)**

Certificate Number DRF/F220x4: **EPT 18 ATEX 3041 X**

Number of the Authority encharged and liable for the production control: **2460**

Applied Normative Number: **EN ISO 16852:2016**

Markings of the Flame arrester DRF/F220x4



II G: indicates the **group of the Protection System**, that's to say the environment of industrial use / application, mining sector/branche not included. Jurop's protection system is suitable to grant protection of working-sites where the eventual explosive atmosphere is formed by gasses/vapours or fogs, with exclusion of dusts;

II B: indicates the **gasses group**, where/whom the protection effectiveness and ATEX safety system has been demonstrated / proven.